Silicon Times Report


The Original Independent OnLine Magazine"
(Since 1987)


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04/05/96 STR 1214  The Original Independent OnLine Magazine!

- CPU Industry Report    - USR I-Modem          - ISDN Series V
- Access Software News   - Phila. Trial Coverage - Gov't TAPS Net
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IRS Computer Project a Fiasco?
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MCI Refunds $44 Million


STReport International OnLine Magazine

Florida Lotto - LottoMan v1.35
Results: 3/23/96: 1 of 6 numbers with 1 match in 19 plays


From the Editor's Desk...


     Happy Easter and Best Wishes to all Celebrating the annual High Holy
Days of Springtime.  The Resurrection of Christ. And Passover.  In stark
truth, we are also celebrating the unjust accusation, trial and ultimate
crucifixion of Jesus Christ.  Obviously, mankind as a whole hasn't learned
very much about being Just or Righteous.  Someday..  maybe but we have a very
long way to go.  God help us all.

     Every now and then. something comes along that deserves everyone's
attention.  In the computing community its usually new software, new
hardware, a merger etc..  Lately though, it seems  there are more and more
"Control Freaks" jumping up trying to force their intentions (right or wrong)
upon the computing community en masse.  Folks, its up to each and every one
of you, who feels you are intelligent and mature enough, to make your own

decisions relative to what you read, view and/or believe in to contact your political representatives.  Regardless of how you may or may not hold them in contempt. please call or write 'em and tell 'em how you feel about all this censorship and control that's being tried.  There seems to be this tight knit "core group" in government, local and national, who seem to insist the population is not capable of fending for itself.   We must, each and every one of us, show them and the entire "herd" of "Control Freaks", from The Hill to the City Council, that we are indeed not only capable but will vote them out if they do not accurately represent us.

      We see Janet Reno's "posse" in all corners of the media trying to make a "big name" for themselves as hot and heavy investigators and enforcers of what's right and proper.  Hmmm IF the Unabomber's brother hadn't blown the whistle on him. these high dollar "feebs" would still be tilting at windmills.  Not to mention their continued chasing headlines, pursuing cultists, surrounding farms and "building fantastic sounding cases against these simple country people.  Too bad they didn't think of these things when they were recently "partying and barbecuing".

      Montana's Freemen.. Sounds like Oregon's Anderson's and/or the Waco-Koresh deal all over again.  Remember??  When they could not get the public to go for the "insurrection and heavily over-armed" shtick. they came in a few days later with the "child molestation" nonsense.  One can only wonder what sort of contrived, constructed or whatever "deal" they'll come up with before they charge into the Freemen and slay the majority.  I pray they don't do this sort of thing again..  I hate to regard our government as murderous and lawless.

      One can only wonder about the act of invading a country, kidnapping their President and then putting that kidnapped leader on trial.  Especially when we, as a nation, paid this guy for almost a decade to do what we tried him for!  But only after he stopped being a "CI" (Co-operating Individual) for two or more government agencies!  What ever became of The U.N., The Monroe Doctrine, The Organization of American States or basically, the rights of and the  respecting of fellow mankind?  What would this nation have done if another nation had swept into Washington DC and kidnapped Bush or North and then put either of them on trial??   This nation's international lawlessness over the last decade has been setting a very dangerous and highly volatile precedent.  God help us if any other nations of the world do unto us as we have done unto others.  Did you know that the United States of America has, at this time and in history, the largest percentage of its population under lock and key than any other nation in the world?  More than even Nazi Germany and Imperial Japan combined during the 1930's and 1940's??

      One last point, many are considering Robert Dole to be "the salvation" of this nation.  While Clinton & Co. are no "GEMS". at least we have a pretty good idea of who most of the "players are" and where they're located in the government.  Must we hazard another three or more years getting to this point all over again?  Personally I say no. Let's not change things at this time.  After all, we all know Gore's stand on censorship and especially his wife's.  Clinton and Hillary are almost an open book.  Its easy to understand them and deal with them as we have all laid down the ground rules.  The Commerce Secretary, Ron Brown, was under all kinds of headhunter investigation until the plane crash.  Now, his eulogies make him appear almost Saint-like.  Yep.. we know what and who is in Washington DC now. must we gamble again?  Do we or the nation have the time?

      Additionally, how many have actually heard. "Yessir I'm voting for Dole!!"  I have heard it so many times I now have a natural reflex reaction.  I immediately ask; Are you really voting for Dole (74 years old!) or in fact,

voting for his yet to be named, Vice President???  Do you really believe Dole
can physically last through his first term??  Take a good look at Clinton the
next time you're watching the news.. In the short time he's been in office.
he's gone completely grey!  In all my years of political observing, one point
has become abundantly clear.  The President's Office is truly a very
stressful position for any man to be in.  Therefore, one must take this into
strong consideration when election time rolls around.  The truth is.. in the
next election, Bob Dole's Vice President stands a bigger chance of finishing
Dole's term than Dole.  Better think real hard about who you are actually
voting for when you choose Dole.  Would you vote for Dole if his running mate
were perhaps the likes of a Buccanan, Agnew, Quayle or Ford type??  Yep.
better think real hard.

     I myself would indeed vote for Dole if. his not yet known running mate
was younger (much younger) and as strong if not stronger than Dole when it
came to Human Rights (primarily at home in the States), Reduction of BIG
Government, Balancing the Budget, reinforcement of the Sherman Anti-Trust
Laws, being more forthright and truthful with the country's citizens and
finally, stopping the hard core drug flow into this county.  There is no
excuse for the continued flow of coca paste, cocaine and  heroin into this
country.  It can be stopped if the government really wanted to do so.  That
is, unless of course, IF the billion dollar per year enforcement,
incarceration and legal industry devoted to the drug trade is willing to be
shut down or, have its resources put to better use.

     These are my opinions. I could be wrong. I'd also like to hear from you
..let me know what you think..


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| AOL | STReport |
| Internet | rmariano@streport.com |
| Internet | CZGJ44A@prodigy.com |
| Internet | RMARIANO@delphi.com |
| Internet | 70007.4454.compuserve.com |
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STReport Headline News

LATE BREAKING INDUSTRY-WIDE NEWS

Weekly Happenings in the Computer World

Compiled by: Dana P. Jacobson

## Germans Want to Clarify Net Laws

In Bonn, Germany, officials are considering a new law they say will make it clear that companies providing access to the Internet are not expected to police cyberspace on the lookout for pornography or neo-Nazi propaganda. Edzard Schmidt- Jortzig, Germany's justice minister, told Andrew Gray of the Reuter News Service firms that offer Net links would be punished only if they discovered illegal material was available via their service and did nothing about it.

He added, "Someone who opens a door cannot know what the people who walk through it are going to be carrying. And if there were body searches for everyone going through your door, people would simply choose to go through another." Reuters says Chancellor Helmut Kohl's government probably will present the draft multimedia law before parliament's summer recess in a bid to banish indecent and illegal material from cyberspace without regulating a booming new industry to death, adding, "The provider could only be punished if he had the ability to take action but did not do so."

The wire service says the comments will come as "a big relief" to executives at companies providing a gateway to the Internet, who feared they could be held personally responsible for the content of millions of pages created on the network all across the world. Net regulation has been a recent issue in Germany, where earlier this year child pornography investigators ordered CompuServe to block access to some 200 Internet newsgroups they considered obscene. Since then, CompuServe has restored access to most of the groups.

Reuters says German authorities also are investigating several other online services as part of a probe into pornographic and neo-Nazi material found on the Net, "but so far prosecutors have not been able to bring any charges, partly because legal experts are unsure where new companies stand under laws drafted long before they existed." The international nature of the Net poses problems for regulators.

For instance, neo-Nazi propaganda, which is protected under free speech laws in the U.S., often is illegal in Germany. "Although the bill may be presented before mid-year," adds the news service, "it could be a long time before it becomes law. Germany's powerful regional states have indicated they may challenge on constitutional grounds Bonn's right to legislate on the issue."

## CEO Seeking to Buy Prodigy?

The New York Times reports this morning that Prodigy CEO Edward Bennett is seeking financing to help him buy the online service outright. Prodigy is jointly owned by IBM and Sears, Roebuck and Co., though as reported in February, Sears has said it is seeking a buyer for its half of the service. The Reuter News Service notes neither company has commented on the Times article.

## Prodigy Buyout Effort Planned

Investment banker Wasserstein Perella Securities Inc. reportedly has been retained by Prodigy's management team in its effort to buy out the ailing online service and possibly take it public. Quoting executives familiar with the talks, reporter Jared Sandberg of The Wall Street Journal writes this morning the Prodigy management hopes to buy the service from its parents -- IBM and Sears, Roebuck & Co. -- for about $250 million, "a number

far smaller than the $500 million Sears  was reportedly seeking for only its 50 percent stake this February."

Adds Sandberg, "It's unclear whether Sears and IBM, which also is looking at dumping its stake, would accept such an offer after investing more than $1 billion in Prodigy. Moreover, some observers wonder how successful Wasserstein will  be at finding investors to buy into a service that's losing ground to competitors."  The paper quotes industry executives as  saying Sears hasn't had any serious suitors for its stake, which it wanted to unload by the end of the first quarter.

One unidentified Prodigy executive told the Journal, "The window opened once the owners realized that no one's going to  come along and buy a 50 percent share. All of a sudden, the kids want to take over their parents' business."

### Sony Promises 'Different' PC

Sony Corp. says that its first home PC, which it will launch by next March, will differ significantly from today's boxy  desktop machines.  Reporting from Tokyo, The Wall Street Journal says this morning, "Sony isn't saying exactly what its  machine will look like, but Kunitake Ando, head of Sony's information-technology unit, said it will be more at home in  users' living rooms than their offices."

Ando told the paper the machine will emphasize connectivity to the Internet and will be more entertainment oriented. He  said it will be his employer's first major attempt to create a new kind of computer by fusing its expertise in consumer  electronics with the fast-paced world of PCs.  The Journal says Sony's plans aren't limited to PC hardware, that the  company also "has high hopes for its recently released 'Apertos' operating system, a so-called microkernel program that  would run appliances such as enhanced televisions."

### Micropolis Sells Drive Business

Micropolis Corp. has closed a $55 million deal to sell its disk drive business to Singapore Technologies and will change  its name to StreamLogic Corp.  Reporting from Los Angeles, United Press International says the new company will   specialize in software and subsystems designed for the movement, storage and management of video and data. (It has  applied for a new stock ticker symbol, STLC, and expects to start trading under that symbol shortly.)

StreamLogic will remain headquartered in the Los Angeles suburb of Chatsworth. It has received $29.7 million from  Singapore Technologies and is entitled to two additional payments. UPI says the disk drive assets will be renamed  Micropolis Pte Ltd.  The new Micropolis said it is expanding its manufacturing capability by moving into a new 400,000  square foot factory in Singapore and debuting three new drives, including an Aries 2 for desktop workstations. It will  keep its research and development center in Chatsworth and continue operating plants in Singapore and Thailand.

### Seagate Acquires Software Publisher

Seagate Technology Inc. has paid $13 million to acquire OnDemand Software, publisher of the WinINSTALL network  software distribution utility.  Seagate notes that OnDemand will add network management technology to Seagate's enterprise management software group. WinINSTALL automates the installation, upgrading and uninstallation of network  applications throughout an organization.

"The integration of WinINSTALL continues to fulfill our commitment to deliver the best point and suite network  management solutions to the market," says Tom Yerkes, president of Seagate's enterprise management software group. "WinINSTALL's ability to provide integration and support for all major network management systems further illustrates  our overall strategy to support our industry colleagues and their platforms."

"We share a common vision and are proud to join the Seagate Software team," adds Neal Ater, president of OnDemand  Software. "This will enable us to achieve levels of integration previously unobtainable."  OnDemand has a sales,  marketing and support organization located in Naples, Florida and a development team located in Takoma Park,  Maryland.  In the new organization, Ater will serve as chief operating officer of the Naples operation; the Takoma Park site will report to Yerkes.

## Epson Ships Zip Drive

Epson America reports that it has begun shipping its Epson Zip Drive to distributors throughout the U.S. and Canada.    Based on storage technology developed by Iomega Corp., the $199 Epson Zip Drive works like a floppy drive but has the  speed of a hard disk. The unit is designed for backups and storing large files, such as graphics and video. The Epson Zip  Drive uses Iomega-compatible 100MB and 25MB capacity Zip disks.

The Epson Zip Drive is available in both SCSI and parallel versions, and is compatible with Macintosh and  DOS/Windows computers. The drive weighs one pound and can sit vertically or horizontally. It has a seek time of 29 milliseconds with a sustained transfer rate of up to 1.25MB per second. The PC model has a throughput of up to 20MB  per minute with a parallel interface that connects directly between a PC and printer.
The Mac/PC SCSI model has a throughput of up to 50MB per minute.

## Microsoft to Make Over Computing

Word is Microsoft Corp. is set to unveil plans for a new device that combines the ability to gain access to the Internet  with the functions of a PC and other household appliances.   The New York Times reports this morning the product -- to  be called the Simply Interactive Personal Computer, or SIPC -- will include the functions of a stereo, videocassette    recorder and television and also will feature data transmission speeds much faster than most current PCs.

This appears to run counter to the current trend toward simple, inexpensive machines that will offer only Internet access,  such as the $500 Network Computer being developed by Oracle Corp.  In The Wall Street Journal this morning, reporter  Don Clark says Microsoft chief Bill Gates will lay out his plans for "a broad makeover of the personal computer" in a  speech Monday at the company's annual hardware engineering conference in San Francisco.

"The initiative will take at least two years and require support from numerous hardware companies," Clark says. Sony  Corp. is expected to play a major role, along with other partners, such as electronics giant Toshiba Corp., Compaq  Computer Corp. and Intel Corp.  Says Clark, "Microsoft is facing strong pressure to act. Recent studies suggest that  affluent U.S. households, the most ready market for new home technology, are approaching saturation of conventional  PCs.

Meanwhile, competitors such as Oracle Corp. Chief Executive Officer Lawrence Ellison are promoting the idea of new,  $500 network computers that would weaken the need for Microsoft's flagship operating software."   Insiders tell

the   Journal Microsoft will unveil a set of hardware specifications and
other technology that, says Clark, "is designed to  help  migrate Microsoft's
Windows 95 operating system and other PC programs to the living room, rather
than replace them  with an entirely new computing platform."

The Journal says SIPC also could lead to new types of networks for handling
home automation functions, "such as  playing a video image of a person at the
front door on a big-screen television set."     The paper adds the SIPC
specifications will include a proposed standard cable connection that could
send data among components at 400 million  bits per second, more than 30
times faster than typical PC connections today.

"Another key concept, dubbed On Now, would bring computers to life in three
to five seconds, rather than the boot time  that can delay PC usage by
several minutes," says the paper.  Clark reports a computer designed to the
SIPC specs might  fit on a shelf with other electronic components, playing
audio through an external stereo system or displaying video from  he coming
generation of video disk players. It also might serve as a telephone
answering machine or a videophone system.

## Apple to Focus on Reliability?

Word is the strategy of the new chieftain at Apple Computer Inc. is to make
computers so reliable and sturdy that  customers will pay a premium price for
them.  Quoting Apple employees and an internal company memorandum, The  New
York Times reports this morning that new Apple Chairman Gilber Amelio has
told a group of technical staff  members the company could not compete on the
same level as makers of computers based on Intel Corp. chips and  Microsoft
Corp. operating systems because of higher research-and-development costs
associated with its own hardware  and software specifications.

Instead, says The Times, Amelio will turn the company toward the creation of
premium-priced computers that will be the  "Maglite of Computers", (referring
to a brand-name, premium-priced flashlight known for its durability).
According to the  Reuter News Service, the move "would mark a shift from
previous strategies of price cuts and direct competition with the rest of the
PC industry."

## Communications Pioneer Honored

The Electronic Frontier Foundation has announced the winners of its fifth
annual Pioneer Awards.  According to the  EFF, the Pioneer Awards recognize
individuals who have made significant and influential contributions to the
development of computer-based communications or to the empowerment of
individuals in using computers.  Robert  Metcalfe, executive correspondent
for InfoWorld and vice president of technology for International Data Group,
is being  honored with a Pioneer Award for his invention of Ethernet, the
widely-used local-area network protocol.

Peter Neumann, principal scientist at SRI International, is being honored
with a Pioneer Award for his extensive  involvement with computer
communication systems and the social and technological issues caused by
computers. He is  also being honored for his work in security issues.  The
EFF is honoring Shabbir Safdar, co-founder of the Voters Telecommunications
Watch (VTW), for his policy work regarding Internet censorship and federal
interference in  telecommunications. VTW, a watchdog group dedicated to
monitoring encroachments on civil liberties in  telecommunications policy,
has fought the FBI's blanket wiretap proposal, federal and New York state
attempts to muzzle  free speech on  the Internet and the Clinton
administration's "Son of Clipper Chip" program.

Matthew Blaze, a computer scientist for AT&T Research, is being honored for his discoveries and influence in  cryptography. He is one of seven experts who wrote the recently released paper "Minimal Key Lengths for Symmetric Ciphers to Provide Adequate Commercial Security," which examined the security problems with U.S. policy limits on  key encryption exports.   His work, says the EFF, has been instrumental in establishing Internet security standards and in  improving both the understanding and effectiveness of cryptographic systems.

"With the growing presence of the Internet  and the public debate surrounding civil liberties, the contributions of this year's award winners deserve special  recognition. In keeping with EFF's mission, they have each contributed to the advancement of electronic communications  in a way that also benefits society," says Esther Dyson, the EFF's chairman.
The four award recipients will be honored today at the Sixth Conference on Computers, Freedom and Privacy.  The  Electronic Frontier Foundation is a non-profit organization founded in 1990 to ensure the protection of civil liberties,  such as privacy and freedom of expression, as new communications technologies emerge.

## Government Taps Computer Network

The first use of a court-ordered wiretap on a computer network has led to charges against an Argentine man accused of  breaking into a Harvard University computer.  According to the U.S. Attorney's Office in Boston, 21-year-old Julio  Cesar Ardita of Buenos Aires used an Internet-linked computer belonging to Harvard's Faculty of Arts and Sciences as a  staging point to crack into numerous computer sites, including several belonging to the Department of Defense and  NASA.

The wiretap, placed during the last two months of 1995, resulted in the filing of a criminal complaint against. An arrest  warrant has been issued for Ardita.  According to the complaint, Ardita invaded the Harvard computer through the  Internet, and once in the system allegedly stole a series of accounts and passwords. Using these accounts as his base,  Ardita reportedly gained unauthorized access to computers at various U.S. military sites across the country, including the  Navy Research Laboratory, NASA's Jet Propulsion Laboratory and Ames Research Center, the Los Alamos National  Laboratory and the Naval Command Control and Ocean Surveillance Center. He also tried repeatedly but unsuccessfully  to enter the Army Research Laboratory computer system, according to the complaint.

Government officials say Ardita was identified by using a specially configured monitoring computer that conducted the  complex searches needed to isolate his activities.  On December 28, 1995, Ardita's computer files and equipment were   seized at his home in Buenos Aires by authorities acting on information supplied by Telecom Argentina which U.S.  authorities had contacted for  assistance in tracking the intruder.

Attorney General Janet Reno and United States Attorney Donald K. Stern of the District of Massachusetts note that a  wiretap order, typically employed to monitor telephone conversations of organized crime and drug suspects, was used to  trace and identify the illegal intruder while preserving the confidentiality of legitimate communications.  Reno notes that  Ardita obtained access to computer systems containing important and sensitive information in government research files  on satellites, radiation and energy related engineering. Ardita wasn't accused of obtaining classified information related to  national security.

According to Reno, Ardita was believed to have illegally entered computer systems at additional U.S. universities, including Cal Tech, the University of Massachusetts, and Northeastern University, and sites in other countries such as Korea, Mexico, Taiwan, Chile and Brazil. "This is an example of how the Fourth Amendment and a court order can be used to protect rights while adapting to modern technology," says Reno. "This is doing it the right way."

## Study Says Ads Target Cyberkids

A new report concludes advertisers and marketers are exploiting kids by promoting products online in ways that manipulate children and violate their privacy. The Federal Trade Commission is looking into whether laws have been violated. Issued by the Center for Media Education, the study urged the FTC to develop safeguards for kids, saying marketers peddling children's products are using a variety of techniques on computer online services and the Internet to collect detailed data and compile individual profiles on kids.

CME President Kathryn Montgomery told Roger Fillion of the Reuter News Service, "Never before has there been a medium with this kind of power to invade the privacy of children and families." The study finds nearly a million children use the Internet's World Wide Web and that 3.8 million have access to the Web. CME says kids are being offered free gifts such as T-shirts and chances to win prizes in exchange for filling out surveys that detail their e-mail address, home address, sex and other personal information.

"Tracking technology," says Reuters, "makes it possible to monitor every interaction between a child and an advertisement, allowing firms to create personalized ads for a child."

## Penthouse Ranked Top Web Site

Adult magazine Penthouse is claiming the title as the most popular publication-based site on the Internet, saying its World Wide Web pages had 54 million hits from Dec. 21 to Jan. 20. Backing up with its claim with data from an independent Nielsen/Internet Profiles survey, officials with the publication told United Press International an average visit to the Penthouse Internet site lasted 12 minutes and 57 seconds, during which 25.35 hits were recorded.

Also:
´• The most popular time for a visit was shortly after midnight and the least popular about 6 a.m.
´• American visitors constitute 68.8 percent of visitors to the site, followed by Australians with 6.7 percent, Canadians with 3.7 percent and Japanese, Germans and South Koreans with just over 2 percent each.
´• Universities accounted for 86,500 visits during the month, led by the University of Minnesota with 8,751 visits followed by the University of Wisconsin and the University of Washington, with 7,337 and 7,166 respectively.
´• Visits originating from computers linked to the Internet through corporate access systems were led by IBM (4,556), Apple Computer (4,462) a
nd
AT&T (3,805).

## Three Charged With Net Joy Ride

Three Alameda County, California, students are charged with stealing their

high school's Net access code and going on a  cyberspheric joy ride, downloading stolen credit card numbers for an online shopping spree.  "These are bright kids,"  investigating officer Sgt. Casey Nice told United Press International in Castro Valley, California. "They just kind of did  something foolish and got in over their heads."

The wire service says the youths were charged with computer crimes, a felony charge carrying a minimum prison  sentence of 16 months. They were released to their parents, and a date has not yet been set for their arraignment.  UPI says the alleged crime spree started when a 15-year-old Castro Valley High School student got the school's America  Online user name and password. He joined with two friends, a 15-year-old San Lorenzo High School student and a 14- year-old student from Alameda's St. Barnabas School.

"The trio logged on to the Internet using the school code and one of their home computers, downloaded stolen credit card  numbers and started shopping," UPI says. "Police were tipped off to the fraud in mid-February when packages started  showing up at a vacant home up for sale near one of the boys' houses."  Adds UPI, "The owner of the home called  authorities to report mysterious shipments of CD-ROM games, compact disks, a 'Beavis and Butt-head' CD-ROM,  computer equipment and other merchandise showing up at his home addressed to people he didn't know."

Officials figure the youths stole at least $5,000 worth of merchandise, but it may be more because items they ordered still  are arriving, Nice said.

### Net Enables Father-Son Reunion

A three-minute search on a new World Wide Web site on the Internet called "The Switchboard" has enabled a 48-year- old toolmaker Roseville, Michigan, to find the man he believes is his long-lost father.  Michael Spangler told Associated  Press writer Kelly Kurt that his mother always refused to talk about the sailor she met in Jacksonville, Florida, in 1947  and married a couple of weeks later. The two lost contact after Dallas Spangler shipped out a few days later and the marriage was annulled.

Reared by his grandparents who told him what they knew about his father, Michael Spangler went twice to Oklahoma  City where he believed Dallas Spangler lived. He had no luck, however, until a friend told him two weeks ago about The  Switchboard, a Net site that contains some 93 million phone numbers for residences and 11 million for businesses.  A  quick search turned up two Dallas Spanglers, one in Tulsa. Michael Spangler telephoned. The 68-year-old man on the  other end of the line didn't quite know what to think.

"I had no idea I had a son," he told AP. "It was kind of shocking."  The Switchboard site can be reached at Web address http://www.switchboard.com/.!

### Gates Gets Ansel Adams Rights

Bill Gates has scored electronic rights to the works of late nature photographer Ansel Adams, some 2,500 images of the  American wilderness.  The Associated Press -- which notes about 9 million books, posters and calendars based on the  stark and moving photos have been sold - says the Corbis Corp., the Bellevue, Wash., company owned by Microsoft  Corp.  chief Gates, is in the process of putting together an enormous digital library.

As reported earlier, Corbis last fall purchased the Bettman Archive and its collection of millions of historical photos.   The wire service says specific terms of the Adams deal were not disclosed, but The New York Times reports

today  Corbis will have exclusive rights to distribute Adams' photos
electronically for 20 years.  The paper also says Corbis'  initial payment to
the family of Adams, who died in 1984 at age 82, will be small, but Gates
hopes to eventually sell  digital images on computer discs or over computer
networks.  Corbis President Doug Rowan told the paper his company  already
has made "many millions of dollars" selling copies of its digital images to
media companies.


ISDN Series STR Focus  "Fully Understanding ISDN"



                    A Guide to Setting Up MSN to Work with ISDN

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Introduction
MSN is now offering ISDN support, which provides access to MSN and the
Internet at twice the speed of a 28.8 modem. ISDN modems also provide more
reliable connections than do standard modems.  To use an ISDN connection, you
must have an ISDN modem (see list below), and be in a location where MSN
provides a phone number that supports ISDN access.   There is no extra charge
for ISDN connections from MSN, although your local phone company will charge
for ISDN service.


ISDN Modems that work with MSN
Currently MSN will support any ISDN modem because they behave exactly like
modems.  We have tested  the following:

´•     Motorola BitSURFR
´•     Motorola BitSURFR PRO
´•      3com Impact
´•     USR Courier I-Modem V.34
´•     Digi Datafire (Win95)
´•     Digi PCIMAC (Win95)
´•     Diehl Diva  (Win95)

Installing your ISDN Modem to work with MSN
There are instructions for setting up the above ISDN modems in the Easy ISDN
Access Forum.  To get to the forum, on the Edit menu, point to Go To, and
then click Other Location. Type the GO Word EasyISDN.  To get the
instructions from the forum, double-click the vendor's folder (i.e. Motorola
ISDN Products), and then double-click the Software BBS. (i.e. Motorola
Software).  In that BBS you will find messages that contain the setup
instructions.

New!  Windows 95 ISDN Accelerator Pack.
A new set of drivers has been released by the Windows 95 team which  allows a
whole new class of ISDN adapters to be used with Windows 95.  Check out the
Win95 folder in the forum for more details on these drivers or follow this
web link.  The adapters listed above with (Win95) require the Windows 95 ISDN

Accelerator Pack to work with MSN.

Signing Up for MSN using ISDN
If you are already a member
You do not need to sign up again.  Continue to use your existing MSN account.
To get ISDN service you need to call an "Internet and The Microsoft Network"
phone number.  To set the phone number, on the Tools menu, click Connection
Settings, and then click Access Numbers.  Select the Internet and The
Microsoft Network service type, and select the closest phone number.

If you are not an MSN member and you have an analog modem in addition to your
ISDN modem.
Setup up your analog modem as your default device.  Double click the MSN icon
and follow the normal setup procedures. During setup make sure to select MSN
and full Internet Access, then select "ISDN access to the Internet and MSN".
If you do not have the option "ISDN access to the Internet and MSN" choose
"Internet and the Microsoft Network".   A full list of ISDN phone number will
be posted i

If you only have an ISDN modem
You must use an analog modem to set up MSN.  Once MSN setup is complete, you
can use your ISDN modem to connect to MSN.  Microsoft is aware that this is a
problem and will be fixing this.

How MSN  Supports ISDN
An ISDN line has three channels, 2 B (bearer) channels and one D (data).  The
D channel is used for connection negotiation and out-of-band signaling, while
the B channels transport the data.  The D channel is rated at 16Kbps and each
B channel can transport at either 56Kbps or 64Kbps depending on your phone
company.  These B channels can either be used separately  or combined
together to make a single 128Kbps connection.

Currently MSN supports ISDN with only 1 B channel.  This means that the
connection speeds will be either 56Kbps or 64Kbps.   Dual channel ISDN access
(using 2 B channels) is not currently supported, but will be Q2 '96.

Frequently Asked Questions:
What is ISDN?
ISDN (Integrated Services Digital Network) is an international standard which
brings high speed data transmission to the desktop.

How can I find the ISDN phone number nearest me?
Check the ISDN phone Number Icon which is the current list of ISDN phone
numbers.

How do I change the phone number I use to connect to MSN to one that supports
ISDN?
On the Tools menu, click  Connection Settings,  click Access Numbers,  and
then select the Internet and the Microsoft Network service type.

What is the phone number I should call for various Telephone Companies?
US WEST:            1-800-898-9675
GTE:                1-800-GTE-4WCN
Ameritech:          1-800-419-5400. (Home Professional & ISDN service)
PAC BELL :          1-800-4PB-ISDN.
NYNEX:              1-800-588-9648
Bell Atlantic:      1-800-204-7332

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Bell South:            1-800-204-7332
South Western Bell: 1-800-SWB-ISDN
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How much does ISDN phone service typically cost?
Currently the rates vary widely depending on your telephone company.  The
rates for basic ISDN service range from $20 - $45 a month for basic service,
with additional per minute charges of $.00 to $.10.

How can I get compression to work?
We currently do not support compression.

How fast is an ISDN modem?
An ISDN modem speeds range from 56Kbps to 144Kbps.  Currently MSN supports
only 56kbps and 64Kbps connection.  We do not support faster connections to
MSN because we only support a single channel.

Can I use 2 or more channels?
Currently MSN does not support dual channels. We plan on supporting 2 channel
access  in  Q2 1996.

Can I connect to MSN with dual B channels using MP?
Not at this time.  MSN will be supporting this feature in 1996.

When will the USR 128k Sportster be supported?
The USR 128k Sportster is not currently supported because USR has not
provided any drivers to the Win95 team for inclusion in the ISDN Accelerator
Pack for Win95.  The USR driver should be released within a few weeks as far
as we can tell.

How much throughput should I expect?
In our tests we have found anywhere between approximately 40,000 bps and
65,000 bps.

Can I use ISDN to get on the Internet or just MSN?
You can use an ISDN modem with the Internet and ISDN.

Where can I get ISDN driver software? Support?
The ISDN Software Files BBS holds all the drivers for all the different ISDN
boards we have received.  You could also look in the specific vendor's folder
if you do not find what you need.


                        Internet Phone Numbers
                                              Updated: 3/29/96


We are working hard to make high speed Internet access widely available,
first in North America, then worldwide.  For technical reasons, we need to
build an entirely new network in order to give you the performance and
functionality we believe you'll want.  As soon as we get the network built in
your area, you will be able to access both the Internet and MSN, at speeds up
to 28.8kb/s, for the same price that you pay for MSN alone.

We are also in the process of enabling ISDN access for those customers who
have ISDN lines and ISDN terminal adapters.  To see if ISDN support is
available in your area, please refer to the ISDN Support column below.  Also,
please note that ISDN support is only available to those customers who are
beta testing our next upgrade to MSN.  If the comment under ISDN Support
indicates "verifying", we are in the final stages of confirming local ISDN
access for those phone numbers.  These "verifying" numbers may only be
accessible from in the local area and we are working with our beta partners

to confirm successful connections.  If you have any questions regarding ISDN
issues, please see the ISDN Forum.

Please be patient as we configure and test this new network--we expect to add
new cities regularly for the next several months.

We have two sets of phone numbers: released numbers that are available to you
when you change phone numbers online, and a second set of numbers that we are
currently testing. If there is no released phone number in your area, you may
be able to use a phone number from the beta phone number list below.


How to Update Your Phonebook

This is a list of currently released Internet access numbers.  To get the
latest phone numbers, while online go to the Tools menu, click Connection
Settings, click Access Numbers, and then click Change.  (Note that the
"phonebook" and this list are not necessarily posted simultaneously to MSN -
there may be differences between the two during the period of time when
updates are happening.)

|            | City              | Phone Number        | ISDN Support 56k | 64k |
|------------|-------------------|---------------------|------------------|-----|

United States

| Alaska     | Anchorage         | Coming Soon!        |       |     |
|------------|-------------------|---------------------|-------|-----|
| Alabama    | Auburn/Opelika    | +1 (334) 5028036    | Yes   | No  |
|            | Birmingham        | +1 (205) 3220856    | Yes   | Yes |
|            | Decatur           | +1 (205) 3535029    | No    | No  |
|            | Gadsden           | +1 (205) 5430504    | No    | Yes |
|            | Huntsville        | +1 (205) 5330409    | Yes   | Yes |
|            | Mobile            | +1 (334) 4316706    | Yes   | Yes |
|            | Montgomery        | +1 (334) 2230902    | Yes   | Yes |
| Arizona    | Phoenix           | +1 (602) 6403907    | Yes   | Yes |
|            | Tucson            | +1 (520) 6200872    | Yes   | Yes |
| Arkansas   | Fayettville       | +1 (501) 4425203    | Verifying |  |
|            | Ft. Smith         | +1 (501) 7825043    | Yes   | No  |
|            | Little Rock       | +1 (501) 3751590    | No    | No  |
|            | Pine Bluff        | +1 (501) 5342288    | No    | Yes |
| California | Anaheim           | +1 (714) 8710966    | Yes   | Yes |
|            | Carlsbad          | +1 (619) 9298643    | Yes   | Yes |
|            | Chico             | Coming Soon!        |       |     |
|            | Concord           | +1 (510) 6096318    | Yes   | Yes |
|            | Englewood         | +1 (310) 3389007    | Yes   | Yes |
|            | Fremont           | +1 (510) 7420207    | Yes   | Yes |
|            | Fresno            | +1 (209) 4951007    | Yes   | Yes |
|            | Huntington Beach  | +1 (714) 3770278    | Yes   | Yes |
|            | Livermore         | +1 (510) 4490339    | Yes   | Yes |
|            | Long Beach        | +1 (310) 6249090    | Yes   | Yes |
|            | Los Angeles       | +1 (213) 6208910    | Yes   | Yes |
|            | Modesto           | +1 (209) 5740196    | Yes   | Yes |
|            | Oakland           | +1 (510) 7048599    | Yes   | Yes |
|            | Ontario           | +1 (909) 4601214    | Yes   | Yes |
|            | Palm Springs      | +1 (619) 3202378    | Yes   | No  |
|            | Palo Alto         | +1 (415) 3220489    | Yes   | Yes |

| State | City | Phone | | | |
|---|---|---|---|---|---|
| | Pasadena | +1 (818) 5850100 | Yes | Yes | NEW! |
| | Rancho Cucamonga | +1 (909) 4819468 | Yes | Yes | |
| | Redding | +1 (916) 2258634 | Yes | Yes | NEW! |
| | Rialto | +1 (909) 8752490 | Yes | Yes | |
| | Sacramento | +1 (916) 4473613 | Yes | Yes | |
| | Salinas | +1 (408) 7510530 | Yes | No | |
| | San Bernadino | Coming Soon! | | | |
| | San Diego | +1 (619) 3380612 | Yes | Yes | |
| | San Francisco | +1 (415) 3579923 | Yes | Yes | |
| | San Jose | +1 (408) 2680582 | Yes | Yes | |
| | San Luis Obispo | Coming Soon! | | | |
| | San Mateo | +1 (415) 3128208 | Yes | Yes | |
| | San Rafael | +1 (415) 4720761 | Yes | Yes | |
| | San Ramon | +1 (510) 8671220 | Yes | Yes | |
| | Santa Ana | +1 (714) 7269031 | Yes | Yes | |
| | Santa Barbara | +1 (805) 8922163 | Yes | No | |
| | Santa Clara | +1 (408) 4921481 | Yes | Yes | |
| | Santa Monica | +1 (310) 4511209 | Yes | | Yes |
| | Santa Rosa | +1 (707) 5221314 | Yes | Yes | |
| | Sherman Oaks | +1 (818) 3402888 | Yes | Yes | |
| | Stockton | +1 (209) 4630351 | Yes | Yes | |
| | Vacaville | +1 (707) 4485608 | Yes | Yes | |
| | Visalia | +1 (209) 6350181 | Yes | Yes | |
| Colorado | Colorado Springs | +1 (719) 3861680 | Yes | Yes | |
| | Denver | +1 (303) 5756188 | Yes | | Yes |
| | Ft. Collins | +1 (970) 2822080 | Yes | Yes | |
| Connecticut | Hartford | +1 (203) 7240636 | No | No | |
| | Stamford | +1 (203) 3577638 | No | No | |
| Delaware | Wilmington | +1 (302) 5760357 | Yes | Yes | |
| District of Columbia | Washington | +1 (202) 2221021 | Yes | Yes | |
| Florida | Bradenton | Coming Soon! | | | |
| | Daytona Beach | +1 (904) 2550389 | Yes | | Yes |
| | Feathersound | +1 (813) 5730863 | No | No | |
| | Ft. Lauderdale | +1 (305) 4867918 | Yes | Yes | |
| | Gainesville | +1 (904) 3711332 | Yes | | Yes |
| | Jacksonville | +1 (904) 3532059 | Yes | | Yes |
| | Lakeland | Coming Soon! | | | |
| | Melbourne | +1 (407) 7231064 | Yes | Yes | |
| | Miami | +1 (305) 3586951 | Yes | Yes | |
| | Orlando | +1 (407) 6482090 | Yes | Yes | |
| | Panama City | Coming Soon! | | | |
| | Sarasota | Coming Soon! | | | |
| | Tampa | +1 (813) 2477863 | Yes | Yes | |
| | West Palm Beach | +1 (407) 6819506 | Yes | Yes | |
| Georgia | Albany | +1 (912) 4300136 | Yes | | Yes |
| | Athens | +1 (706) 2080448 | Yes | | Yes |
| | Atlanta | +1 (404) 8178166 | Yes | | Yes |
| | Augusta | +1 (706) 8210025 | Yes | | Yes |
| | Columbus | +1 (706) 6419942 | Yes | | Yes |
| | Macon | Coming Soon! | | | |
| | Savannah | +1 (912) 6519899 | Yes | Yes | |

| State | City | Phone | | | |
|-------|------|-------|---|---|---|
| | Smyrna | +1 (770) 4324637 | Yes | Yes | |
| Hawaii | Honolulu | Coming Soon! | | | |
| Idaho | Boise | +1 (208) 3816880 | Yes | | Yes |
| Illinois | Bloomington | +1 (309) 4346030 | Yes | | Yes |
| | Champaign | +1 (217) 3983250 | Yes | Yes | |
| | Chicago | +1 (312) 9862476 | Yes | | Yes |
| | DeKalb | +1 (815) 7483932 | Yes | | Yes |
| | Elk Grove | +1 (708) 2287840 | Yes | | Yes |
| | Franklin | +1 (312) 9841580 | Yes | | Yes |
| | Hinsdale | +1 (708) 2415600 | Yes | | Yes |
| | Irving | +1 (312) 5092301 | Yes | | Yes |
| | Naperville | +1 (708) 5058070 | Yes | Yes | |
| | Northbrook | +1 (708) 4803110 | Yes | Yes | |
| | Springfield | +1 (217) 5273440 | Yes | Yes | |
| | Stewart | +1 (312) 8730070 | Yes | Yes | |
| Indiana | Bloomington | +1 (812) 3234330 | Yes | | Yes |
| | Evansville | +1 (812) 4333080 | Yes | | No |
| | Indianapolis | +1 (317) 9771010 | Yes | | Yes |
| | Lafayette | +1 (317) 7723000 | Yes | | Yes |
| | South Bend | +1 (219) 2392090 | Yes | Yes | |
| | Terre Haute | +1 (812) 2385600 | No | No | |
| | Valparaiso | +1 (219) 5314152 | Yes | | Yes |
| Iowa | Cedar Rapids | +1 (319) 3681500 | No | No | |
| | Davenport | +1 (319) 3332000 | No | No | |
| | Des Moines | +1 (515) 3237000 | Yes | | Yes |
| | Iowa City | +1 (319) 3413020 | Yes | | Yes |
| Kansas | Topeka | +1 (913) 3689804 | Yes | Yes | |
| | Wichita | +1 (316) 3830018 | Yes | Yes | |
| Kentucky | Lexington | +1 (606) 2525628 | Yes | | Yes |
| | Louisville | +1 (502) 5834400 | Yes | | Yes |
| Louisiana | Baton Rouge | +1 (504) 3836126 | Yes | | Yes |
| | Monroe | +1 (318) 3222121 | Yes | Yes | |
| | New Orleans | +1 (504) 5253564 | Yes | Yes | |
| | Shreveport | +1 (318) 6760748 | Yes | Yes | |
| Maine | Portland | +1 (207) 8421300 | Yes | Yes | |
| Maryland | Baltimore | +1 (410) 7270315 | Yes | | Yes |
| | Frederick | +1 (301) 6638403 | Yes | No | |
| | Annapolis | +1 (410) 2633325 | Yes | | Yes |
| Massachusetts | Boston | +1 (617) 9274200 | Yes | | Yes |
| | Braintree | +1 (617) 3803400 | Yes | | Yes |
| | Burlington | +1 (617) 2210500 | Yes | Yes | |
| | Cambridge | +1 (617) 6790500 | Yes | Yes | |
| | Danvers | +1 (508) 7395000 | Yes | Yes | |
| | Framingham | +1 (508) 6284600 | Yes | | Yes |
| | Springfield | +1 (413) 8464500 | Yes | Yes | |
| | Waltham | +1 (617) 6727400 | Yes | Yes | |
| Michigan | Ann Arbor | +1 (313) 2132220 | Yes | Yes | |

|  |  |  |  |  |
|---|---|---|---|---|
|  | Belleville | +1 (313) 9571268 | Yes | Yes |
|  | Detroit | +1 (313) 2254994 | Yes | Yes |
|  | Farmington | +1 (810) 4420016 | Yes | Yes |
|  | Grand Rapids | +1 (616) 4593620 | Yes | Yes |
|  | Lansing | Coming Soon! |  |  |
|  | Southfield | +1 (810) 2623138 | No | Yes |
|  | Warren | +1 (810) 5759931 | Yes | Yes |
| Minnesota | Minneapolis | +1 (612) 3217960 | Yes | Yes |
| Mississippi | Biloxi/Gulfport | +1 (601) 8633593 | Yes | Yes |
|  | Jackson | +1 (601) 3554521 | Yes | Yes |
| Missouri | Columbia | +1 (314) 8868621 | No | No |
|  | Harvester | +1 (314) 9403200 | Yes | Yes |
|  | Kansas City | +1 (816) 2830607 | Yes | Yes |
|  | Springfield | +1 (417) 8756902 | Yes | Yes |
|  | St. Louis | +1 (314) 2137700 | Yes | Yes |
| Montana | Butte | Coming Soon! |  |  |
| Nebraska | Omaha | +1 (402) 2337768 | Yes | Yes |
| Nevada | Las Vegas | +1 (702) 3828340 | Yes | Yes |
| New Hampshire | Nashua | +1 (603) 5946600 | Yes | Yes |
| New Jersey | Cherry Hill | +1 (609) 3211995 | Yes | Yes |
|  | Hackensack | +1 (201) 2870315 |  | Verifying |
|  | Holmdel | +1 (908) 3321001 | Yes | NEW! |
|  | Long Branch | +1 (908) 9331114 | Yes | Yes |
|  | Mercerville | +1 (609) 5867747 | Yes | Yes |
|  | Morristown | +1 (201) 9842407 | Yes | Yes |
|  | New Brunswick | +1 (908) 4632172 | Yes | Yes |
|  | Newark | +1 (201) 6221592 | Yes | Yes |
|  | Paterson | +1 (201) 2791225 | Yes | Yes |
|  | Pleasantville | +1 (609) 5697800 | No | No |
|  | Rahway | +1 (908) 3820026 | Yes | Yes |
|  | Trenton | +1 (609) 7775551 | Yes | Yes |
| New Mexico | Albuquerque | Coming Soon! |  |  |
| New York | Albany | +1 (518) 4266070 | Yes | Yes |
|  | Binghamton | +1 (607) 7621280 | No | No |
|  | Brentwood | +1 (516) 2312680 | Yes | Yes |
|  | Buffalo | +1 (716) 8433000 | Yes | Yes |
|  | Garden City | +1 (516) 2281980 | Yes | Yes |
|  | New York | +1 (212) 2384220 | Yes | Yes |
|  | Port Chester | +1 (914) 9332820 | Yes | Yes |
|  | Poughkeepsie | +1 (914) 4514240 | Yes | Yes |
|  | Rochester | +1 (716) 3277189 | No | No |
|  | Rome/Utica | +1 (315) 3386900 | Yes | NEW! |
|  | Syracuse | +1 (315) 4421220 | No | No |
|  | White Plains | +1 (914) 6813900 | Yes | Yes |
| North Carolina | Ashville | Coming Soon! |  |  |
|  | Charlotte | +1 (704) 3422422 | Yes | Yes |
|  | Durham | +1 (919) 3619127 | Yes | Yes |
|  | Fayetteville | +1 (910) 3233915 | No | No |

| State | City | Phone | | |
|---|---|---|---|---|
| | Goldsboro | +1 (919) 7368100 | No | No |
| | Greensboro | +1 (910) 5742663 | Yes | Yes |
| | Raleigh | +1 (919) 8726557 | Yes | Yes |
| | Rocky Mount | +1 (919) 9720919 | No | No |
| North Dakota | Fargo | Coming Soon! | | |
| Ohio | Akron | +1 (216) 2539990 | Yes | Yes |
| | Cincinnati | +1 (513) 6212600 | Yes | Yes |
| | Cleveland | +1 (216) 5792593 | Yes | Yes |
| | Columbus | +1 (614) 2220025 | Yes | Yes |
| | Dayton | +1 (513) 6408391 | Yes | Yes |
| | Toledo | +1 (419) 2462010 | Yes | Yes |
| Oklahoma | Oklahoma City | +1 (405) 2700346 | Yes | Yes |
| | Tulsa | +1 (918) 5820535 | Yes | Yes |
| Oregon | Beaverton | +1 (503) 6772210 | Yes | Yes |
| | Eugene | +1 (541) 3020140 | Yes | Yes |
| | Portland | +1 (503) 2945600 | Yes | No |
| | Salem | +1 (503) 3162070 | Yes | Yes |
| Pennsylvania | Allentown | +1 (610) 7972140 | Yes | Yes |
| | Altoona | +1 (814) 9411280 | Yes | Yes |
| | Conshohoken | +1 (610) 9419491 | Yes | Yes |
| | Erie | Coming Soon! | | |
| | Greensburg | +1 (412) 8539601 | Yes | Yes |
| | Harrisburg | +1 (717) 7200671 | Yes | Yes |
| | Hershey | +1 (717) 5334574 | Yes | No |
| | Paoli | +1 (610) 7259325 | Yes | Yes |
| | Philadelphia | +1 (215) 4480370 | Yes | Yes |
| | Pittsburgh | +1 (412) 3942280 | Yes | Yes |
| | Wilkes-Barre | +1 (717) 8252150 | Yes | Yes |
| Rhode Island | Providence | +1 (401) 2767700 | Yes | Yes |
| South Carolina | Charleston | Coming Soon! | | |
| | Columbia | +1 (803) 7998828 | Yes | Yes |
| | Greenville | Coming Soon! | | |
| | Florence | +1 (803) 6730446 | Yes | Yes |
| South Dakota | Sioux Falls | +1 (605) 3673553 | Yes | Yes |
| Tennessee | Chattanooga | +1 (423) 7563630 | Yes | Yes |
| | Jackson | +1 (901) 4224222 | Yes | Yes |
| | Knoxville | +1 (615) 5245333 | Yes | Yes |
| | Memphis | +1 (901) 7613312 | Yes | Yes |
| | Nashville | +1 (615) 7488011 | Yes | Yes |
| Texas | Abilene | +1 (915) 6271900 | | Verifying |
| | Amarillo | +1 (806) 3547500 | Yes | No |
| | Austin | +1 (512) 4331957 | Yes | Yes |
| | Baytown | +1 (713) 4272418 | No | No |
| | Beaumont | +1 (409) 8338627 | No | No |
| | College Station | +1 (409) 8466549 | Yes | Yes |
| | Corpus Christi | +1 (512) 8884226 | No | No | NEW! |
| | Dallas | +1 (214) 7411839 | Yes | Yes |
| | El Paso | +1 (915) 5445156 | No | No |

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                Ft. Worth           +1 (817) 8509253    Yes         Yes
                Harlingen           +1 (210) 4287010    No   No
                Houston             +1 (713) 5670439    Yes         Yes
                Irving              +1 (214) 4386536    No   No
                Longview            +1 (903) 2342700    No   No
                Lubbock             +1 (806) 4721003    Yes  No
                Midland             +1 (915) 4982003    Yes         Yes
                Odessa              +1 (915) 4982004    Yes         Yes
                Richardson          +1 (214) 2353493    Yes  Yes
                San Antonio         +1 (210) 3529934    No   No
                Temple              +1 (817) 7781025    No   No
                Waco                +1 (817) 7557212    No   No
                Westheimer          +1 (713) 6259900    Yes  Yes

Utah            Ogden               +1 (801) 3991119    Yes  Yes
                Provo               +1 (801) 3432720    Yes  No
                Salt Lake City              +1 (801) 3214980    Yes No

Vermont         Burlington          Coming Soon!

Virginia        Fredricksburg       +1 (540) 3723058    Yes         Yes
                Lynchburg           +1 (804) 9479090    Yes  Yes
                Manassas            +1 (703) 3315982    Yes  No
                Norfolk             +1 (804) 5335140    Yes  Yes
                Princess Anne       +1 (804) 5639922    Yes  Yes
                Richmond            +1 (804) 6749183    Yes  Yes
                Roanoke             +1 (540) 8570700    Yes  Yes

Washington      Everett             +1 (206) 2611320    Yes  Yes
                Kennewick           +1 (509) 7340697    Yes  Yes
                Olympia             +1 (360) 3571091    Yes  Yes
                Redmond             +1 (206) 7390181    Yes  Yes
                Seattle             +1 (206) 4412632    Yes  Yes
                Tacoma              +1 (206) 5978996    Yes  Yes

West Virginia           Charleston              +1 (304) 3440141
Yes             Yes
                Clarksburg          +1 (304) 6244023    No   No
                Huntington          +1 (304) 5220301    Yes         Yes
                Morgantown          Coming Soon!
                Wheeling            +1 (304) 2340229    No   No

Wisconsin       Green Bay           +1 (414) 5929060    Yes         Yes
                Madison             +1 (608) 2526580    Yes  Yes
                Milwaukee           +1 (414) 2271301    Yes  Yes

Wyoming         Laramie             Coming Soon!

Canada

Alberta         Calgary             +1 (403) 7815200    Yes  Yes
                Edmonton            +1 (403) 4235600    Yes  Yes

Quebec          Montreal            +1 (514) 8667181    Yes  Yes

Ontario         Ottawa              +1 (613) 5949044    Yes  Yes
                Toronto             +1 (416) 3639625    Yes  Yes

British Columbia            Vancouver               +1 (604) 6021506
Yes             Yes
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Manitoba      Winnipeg           +1 (204) 9561440     Yes Yes

Australia

NSW           Sydney             +61 (2) 2965000      Yes Yes

Victoria      Melbourne          +61 (3) 92900000     Yes Yes

Queensland    Brisbane           +61 (7) 33614000     Yes Yes    NEW!

Canberra      Canberra           +61 (6) 2170700      Yes Yes    NEW!
```

Beta Phone Number List

This is the list of cities undergoing testing.  You are welcome to use these
numbers during the testing period, but you should realize that they may not
be available for extended periods, as we reconfigure the network and run our
own tests.

If you encounter any problems with these numbers please report them via the
normal support channels located in Member Assistance.Member Support.  Enjoy!

```
                               Phone Number         ISDN Support
United States

California    Bakersfield        +1 (805) 8610826     Yes
Florida       Fort Pierce        +1 (407) 4620510     Yes    NEW!
New York      Ithaca             +1 (607) 2664300     Yes    NEW!
Virginia      Harrisonburg       +1 (540) 5742554     Yes    NEW!
Washington    Pullman            +1 (509) 3325402     Yes    NEW!

Australia

Western Australia       Perth                +61 (9) 2625000     Yes
NEW!
```

Courier I-modem for PC and Macintosh

Access Both High-Speed ISDN Networks and Analog Modems or Fax Devices
Courier I-modem brings ISDN connectivity and analog compatibility together in
a  single  device. It is the ideal desktop  solution for high-speed corporate
LAN  connections,  graphic  intensive Internet access,  data  intensive  file
transfers,  and  access to online services.  The Courier I-modem features  an
integral analog device port that provides the flexibility to send or  receive
a  fax,  talk on the phone, or log an answering machine message at  the  same
time as a data transfer.  Desktop and ISA card versions available.


´•    High-Speed File/Imaging Transfer
´•    Telecommuting
´•    Internet Access
´•    Universal Connect
´•    Software Downloads via Flash ROM
´•    Integrated V.34 Fax/Modem
´•    Robotics V.Everything Technology
´•    Integrated Analog Device Port
´•    Integrated NT-1

´•     Asynchronous/Synchronous PPP
´•     Windows95 Enhancements
´•     Multi-Vendor Interoperability
´•     User Configurable Dial Security
´•     Microsoft Plug 'n Play Support
´•     Five-year limited warranty; factory repair or replacement.


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## MICROSOFT PITCHES NEW PC CONCEPT

In a counter to Oracle's promotion of a new $500 Internet device, Microsoft has plans to develop a Simply Interactive  PC, or SIPC, designed to move from the home office to the living room to perform functions such as controlling the  stereo, video disk player, household security system, etc. while enabling family members to surf the Net or play  interactive games.   "I think what Gates is doing is preemptively striking past where Ellison is at," says one analyst.  "By  comparison, the network computer is so limited." Microsoft has been working on the SIPC idea since last summer and specifications include a proposed standard cable connection that could send data among the various components at speeds  30 times faster than today's typical PC connections, and a boot-up sequence that would take only three to five seconds.  (Wall Street Journal 29 Mar 96 B7)

## CHARGES AGAINST ARGENTINEAN
## FOLLOW FIRST COMPUTER WIRETAP

An Argentine resident of the U.S. has been charged by federal investigators with using a Harvard University computer as  a staging point to illegally enter numerous other Internet sites, including ones at Caltech's Jet Propulsion Laboratory, the  University of Massachusetts, and Northeastern University, along with other sites in Mexico, Taiwan, Chile, Brazil, and South Korea.  An investigator said that with a court-authorized wiretap "we intercepted only those communications which  fit the pattern [of illegal entries]... We limited our initial examination ... around the telltale sign to protect the privacy of  innocent communications."  (Los Angeles Times 30 Mar 96 A10)

## ATLANTIC MONTHLY SETTLES ELECTRONIC PUBLISHING SUIT

Atlantic Monthly has agreed to settle a lawsuit brought by a Rutgers University professor, who charged that the magazine  violated his commercial rights when it placed excerpts of his book in the Lexis-Nexis database, which sells its contents to  customers.  The magazine admitted to no wrongdoing, but says in the future, it will negotiate with freelancers specific  rights to post and distribute works via CD-ROM, online networks, databases, and in other electronic formats.  "In terms  of the correct view of copyright law, there are no implications at all," concludes Time Inc.'s general counsel. (Wall  Street Journal 29 Mar 96 B5)

## IRS COMPUTER PROJECT CALLED
## A FOUR-BILLION-DOLLAR FIASCO

Treasury Secretary Robert Rubin has admitted to a congressional committee that his department doesn't have an overall  master plan or blueprint for the multibillion modernization effort intended to replace the Sixties-era mainframes now in  operation at the Internal Revenue Service and to link IRS offices across the nation.  Congressman Jim Lightfoot  characterized the project as "a $4-billion- fiasco that is floundering because of inadequate planning."  Secretary Rubin  says the only plan that exists (and which he has not read) is a highly technical 6,000-page document that "is not what we need."  (Los Angeles Times 29 Mar 96 D1)


## WIRELESS AUCTION NO-GO

Go Communications of Alexandria, Virginia, is dropping out of the Federal Communications Commission's auction of  wireless communications licenses, saying it couldn't match the "exorbitant" bids of companies such as Netwave Personal  Communications, which has bid $3.7 billion for licenses that would allow them to serve markets containing 81 million  people.  Go's president says that "the FCC is, in essence, providing subsidized government financing to large Korean  conglomerates that have provided the majority of Netwave's funds."  (New York Times 30 Mar 96 p23)


## CLINTON ADMINISTRATION BACKS UNIVERSAL ACCESS

The National Telecommunications and Information Administration has asked the FCC to pass rules that would make  subsidized telephone service more readily available to disadvantaged and rural citizens.  NTIA noted that a telephone not  only connects "an individual to neighbors and loved ones but with the addition of a computer and a modem, it furnishes a  pathway to the Information Age, offering enhanced employment and educational opportunities." Although the  administration was careful not to specifically include Internet access in its proposal, the director of telecommunications  and technology studies at the Cato Institute worries that might come next:  "When they first talked about universal service  as a system of subsidies for rural service, I could live with that.  But what concerns me now is that they seem to want to extend the universal service doctrine to Internet access, cable TV access... It's always been the case that rich people buy  things before poor people do.  Natural penetration rates are different for different products.  You can't second-guess the
market."  (Los Angeles Times 30 Mar 96 D1)


## GATES ISN'T CRYING OVER PC SALES SLOWDOWN

Microsoft's Bill Gates has a sarcastic response to worries over slowing PC sales:  "Name an industry that's going to grow  faster than the PC industry.  Now, don't start crying.  It's very sad; this is sad news.  This is going to be tough for you:   We might only grow at 18 percent!  Now that's on top of 60 million units a year.  This has got to be rough, very rough."
(Upside Apr 96 p38)


## BRITISH TELECOM IN MERGER TALKS
## WITH CABLE & WIRELESS

British Telecommunications PLC and Cable & Wireless PLC are holding exploratory discussions about the possibility of  merging to create a $50 billion telecom conglomerate.  British Telecom has a partnership with MCI, which is the second-largest long-distance in the U.S.  (New York Times 29 Mar 96 C5)


## SILICON FAMINE

Analysts at Dataquest and Rose Associates are predicting a shortage of silicon wafers used to manufacture  microprocessing chips that will hamper chipmakers' ability to meet demands for the next few years.  According to

Dataquest estimates, the silicon drought could last into the next century, at least for the 200-millimeter size wafer.  The  problem arises from the non-stop demand since 1990 -- historically up until then, demand had slackened every three years  or so, giving silicon suppliers a chance to catch up.  But with chip output rising to record levels over the past few years,  "the whole food chain is stretched right to a thin hair," says the president of Rose Associates.  (Business Week 25 Mar 96 p82)

## CYBERTOT MARKETING IS CRITICIZED
The Center for Media Education, a Washington, D.C.-based nonprofit research and lobbying group, says that many of  the micromarketing strategies aimed at children engaged in online interactive activities are "manipulative, deceptive, and  exploitive."  The group's president says:  "I believe the online medium will be the dominant medium in children's lives  in the 21st century, and I don't think people realize this.  Parents see it as an alternative, and computers still have this  'halo effect' as something new and wonderful, something they'd rather have kids do than sit in front of the TV.  But it's  in no way safe from the kinds of advertising and marketing practices that can harm kids.  Most parents can't see the  possibilities; they don't even know how to log on."  (New York Times 29 Mar 96 A12)

## SOLVING TRAFFIC JAMS ON THE INTERNET
A recently announced National Science Foundation grant program is aimed at funding scientific and engineering projects  that require innovative ways of regulating traffic flow on the Internet.  "We need to take a deeper look at this, not just try  to expand capacity and stay ahead of demand," says Mark Luker, manager of NSF's network connections program.   "Some traffic needs better or different service than other traffic."  The hope is that new ways of prioritizing data streams  according to their needs will result from the funding effort.  "There's a vision here of a more effective Internet - one that  has different qualities of service for different needs and can guarantee the kind of service you need to what you want to  do," says Luker. (Science News 23 Mar 96 p181)

## MCI REFUNDS $44 MILLION FOR OVERBILLING
MCI will refund about $44 million to collect-call customers who might have been overbilled because of a programming  bug that caused some customers to be overbilled an average of 18 cents for automated collect calls.  (New York Times 30 Mar 96 p9)

## EDUPAGE IN CHINESE
We are pleased to announce a Chinese edition of Edupage, which will be produced and distributed by Alex Chiu and  Huey-Ping Chang in Taipei, Taiwan, Republic of China.  Welcome to our Chinese-speaking readers of Edupage!  <Chinese big5 characters follow> ~wT PUP ~qo\  Edupage SSS TCoI oy'eB ~AouY#R^  Big-5  XTCoooAPpTG+zP>o> O TSP oAODog'Hup alexchiu@hope.hinet.netoC <End of Chinese> To receive the Chinese  edition (Big5 code) of Edupage, just write to alexchiu@hope.hinet.net. [Besides English, Edupage is now available in Chinese, French, German, Hebrew, Hungarian, Italian, Lithuanian, Portuguese, Romanian and Spanish editions.]

## BELLS, BELLS, BELLS:  AND THEN THERE WERE SIX
The number of Bell companies will shrink from seven to six when Texas-based SBC Communications receives the  expected regulatory permission to buy California-based Pacific Telesis for $17 billion, forming this country's second- largest phone company (after AT&T), with more than $21 billion in annual revenues and a service market area of more  than 30 million phone lines in seven states:  California, Nevada, Texas, Oklahoma, Arkansas, Kansas and Missouri.  The  new company will increase (by 1000), rather than reduce, the total number of positions now held by the 100,000  employees of the two

companies -- and industry analysts say the acquisition is focused not on cost reduction but rather on  market expansion.  More than 50% of all international calls to Mexico are in states served by the newly combined company, which is headquartered in San Antonio and already owns a 10% equity stake in the Mexican national phone  company, Telefonos de Mexico.  (New York Times 2 Apr 96 A1)

## MICROSOFT EXCHANGE CHALLENGES LOTUS NOTES

Microsoft rolled out its Exchange Server software this past weekend in a challenge to Lotus Notes' dominant position in  the corporate groupware market.  Exchange allows users to set up internal BBSs, set up meetings with a group-scheduling  feature and send e-mail with links to the Web.  Notes' advantages include a feature that automatically synchronizes all   changes made to a document in a collaborative editing session.  Notes runs on a variety of servers and operating systems  while Exchange runs only on Windows NT.  "I'm tired of shadowboxing," says Lotus's executive VP.  "We are going to  have a slugfest, and they are going to get their nose bloodied."  (Wall Street Journal 1 Apr 96 B5)

## JUNK E-MAIL LAWSUIT

In what lawyers say is the first of its kind, a small electronic advertising company has sued America Online in federal  court for interfering with its attempts to send "junk e-mail" advertisements over the AOL system.  Cyber Promotions,  which went into business last year as Promo Enterprises, says AOL attempted to put it out of business by sending "e-mail  bombs" to Cyber's e-mail accounts, crashing the servers of two out of three of its Internet-service providers. Cyber had  signed contracts to send the junk e-mail on behalf of its customers.  "In general, mass e-mailing is a violation of America  Online's terms of service, and we frequently hear from our members who consider it an annoyance and a disruption of  the network," says an AOL spokesman.  (St. Petersburg Times 1 Apr 96 p8)

## FEDERAL FUNDING IS ESSENTIAL
## TO TECHNOLOGY, SAYS COMMERCE

Commerce Under Secretary for Technology Mary L. Good says cuts proposed by congressional Republicans could  jeopardize U.S. leadership in developing emerging and enabling technologies.  "These cuts would deliver a devastating blow to our nation's current R&D infrastructure, eliminating more than 35,000 scientists and engineers from the U.S.  R&D enterprise."  Areas affected include environmental, food safety, civilian aviation safety and educational technologies.  Good warned that although attention has focused on Europe and Japan as the most likely competitors in the  technology field, countries such as Argentina, Mexico, Brazil, China, South Korea and Indonesia all are working  aggressively to acquire technology and develop indigenous technology resources.  (BNA Daily Report for Executives 29  Mar 96 A25)

## SMALL PHONE COMPANIES WANT INTERNET REGULATION

Small telephone companies, faced with new technology that enables phone calls, particularly long-distance ones, to be  placed over the Internet, are clamoring for more government regulation of Internet activities.  While Internet access is  defined as an "enhanced service," free from federal access charges, telephone companies must pay FCC fees when they  provide long-distance service.  "The Internet completely shatters the model that has been established to keep those  subsidies alive," says a Heritage Foundation policy analyst.  "The really scary thing is extending FCC price regulations into the computer sector.  Just because we have an existing system in place and one group is getting stuck, doesn't mean  we have to go stick it to another group."  The America's Carriers Telecommunication Association has petitioned the FCC  to stop the use of the Internet for long-distance service, and the FCC has extended the comment deadline to May 8.

## CABLE VS. TELCO INTERNET PLANS

Cable operators aren't worried about the recent announcements by both MCI and AT&T that they will offer low-cost  Internet access to their customers. "They can do all the deals they want to, but the physical links into the home still  remain the same," says a Comcast VP.  While phone companies must accelerate their plans to upgrade their systems,  cable companies are confident their existing 10 Mbps modems will outstrip phone companies' offerings.  "We have a  different service paradigm."   (Broadcasting & Cable 25 Mar 96 p72)   Meanwhile, researchers at Canada's Northern  Telecom are working on a new digital format that is cheaper than telephony's ADSL (asymmetric digital subscriber line)  but about as fast, at receive rates of 2 Mbps and send rates of 500 Kbps.  While the receive rate is much lower than cable's touted technology, the "upstream" speed may actually be higher in real-world terms than what cable companies  ultimately are able to offer. "The telcos are in a stronger position than many would believe," says a Northern Telecom  VP. (Business Week 1 Apr 96 p87)  And MCI plans to be the first carrier to upgrade its Internet backbone from 45 Mbps  to 155 Mbps. "The explosive growth of the Internet has led to rush-hour traffic conditions for many users," says MCI VP  Vint Cerf.  "We're going to do what we can to eliminate any contribution to that congestion."  (Information Week 25 Mar 96 p32)

## CONSUMERS PRESS FOR 911 CELL-PHONE SERVICE

Consumer groups such as the Ad Hoc Alliance for Public Access to 911 want the federal government to require the  cellular telephone industry to guarantee that all cell phone owners have 911 access.  Currently, only people who subscribe  to a cellular service have guaranteed access.  The Cellular Telecommunications Industry Association maintains that  requiring cellular companies to complete 911 calls for callers who have not subscribed to a service would aggravate  cellular fraud.  (St. Petersburg Times 1 Apr 96  p9)

## RECYCLING TECHNOLOGY

Duke University has turned to recycling its old computers, refurbishing them and donating them to a local high school.   The result is a 60-computer network connected to the high school's existing server.  Meanwhile, Boise State University  has shipped more than 1,000 used computers to Idaho schools during the past year.  The dean of Boise's College of  Education and Instructional Technology calls the program a "win-win deal" for the community.  (Chronicle of Higher Education 5 Apr 96 A19)

## CORBIS WINS RIGHTS TO ANSEL ADAMS PHOTOS

Corbis Corp., owned by Bill Gates, has acquired exclusive rights to electronically distribute photographer Ansel Adams's  works via CD-ROM or online.  The Ansel Adams Publishing Rights Trust has requested a strong commitment from  Corbis to ensure the quality of the digital images, and retains veto power over the use of each photograph.  The trust will  receive about $20,000 up front, plus a relatively large share of future royalty fees. (Wall Street Journal 2 Apr 96 B5)

## MICROSOFT WANTS TO SURROUND YOU AND START YOU UP

Further blurring the lines between TV and PC capabilities, Microsoft is planning to integrate Dolby Laboratories' six- speaker Surround Sound technology into personal computer software. (Atlanta Journal-Constitution 2 Apr 96 F3) ...  Microsoft  also says it will use the OnNow standard to allow PCs to turn on instantly and be immediately (like toasters  and other consumer appliances);  Microsoft executive Jim Allchin says:  "Users are demanding that PCs become more  convenient to access and use.  They want their PC to be instantly available to answer the phone, display new e-mail,

browse the Internet or run an application."  (Financial Times 2 Apr 96 p19)

                    AMELIO'S FLASHFLIGHT STRATEGY FOCUSED ON QUALITY
Positioning Apple as a maker of higher-quality computers for which customers
will be willing to pay more than for  competing products, CEO Gil Amelio has
illustrated his point by comparing a cheap flashlight with the one he owns
himself:  a higher quality Maglite flashlight that is more expensive to own.
Amelio told the staffers that Apple can not  compete directly on cost with
PCs based on Intel microprocessors and Microsoft operating systems, because
Apple's  smaller size relative to those companies means that it has higher
per-unit costs attributable to research and development.   Amelio's two
immediate predecessors went different ways, with John Sculley focusing on
making Apple computers  different from PCs and Michael Spindler focusing on
making them price-competitive.  Both left their jobs under pressure.   (New
York Times 2 Apr 96 C20)


                        WorldNet to offer CompuServe access
WorldNet, AT&T's Internet access service, plans to offer its customers access
at discounted prices to CompuServe.  A  similar arrangement is already in
place between WorldNet and AOL, and additional alliances of this nature are
in the  discussion stage.  (New York Times 4 Apr 96 C4)


                        PRODIGY MANAGERS ATTEMPT BUYOUT
Prodigy Services' management team has hired investment banker Wasserstein
Perella Securities Inc. to attempt a  management buyout of the commercial
online service.  The team is hoping to make the purchase for about $250
million,  less than a quarter of what Prodigy parents Sears, Roebuck & Co.
and IBM have plowed into it.  The potential buyout  offer takes advantage of
Sears' desire to get out of the business in a hurry.  "The window opened once
the owners  realized that no one's going to come along and buy a 50% share,"
says one executive familiar with the situation.  "All of  a sudden, the kids
want to take over their parents' business."  (Wall Street Journal 4 Apr 96
B6)


                    MCI PREMATURELY PULLS THE PLUG ON BIG BLUE
When IBM broke the news to MCI that it had decided to switch to AT&T for its
$3 billion voice and data transmission  services contract, MCI apparently
decided to cut off service before IBM's old contract had expired.  MCI's
unexpectedly  abrupt departure left AT&T scrambling to fill the gap,
marshaling the services of 1,000 employees over the weekend to  ensure
continuity.  IBM for many years has been MCI's biggest customer, with their
relationship dating back to the 1980s.  (Wall Street Journal 4 Apr 96 B1)


                    BROAD SOFTWARE PATENT SPARKS MORE LAWSUITS
A small New Jersey company is claiming it holds a patent on technology for
distributing software, images, type fonts and  information via electronic
networks, and has filed a lawsuit against 22 companies for patent
infringement.  E-data Corp.,  which bought the patent in 1994 from computer
scientist Charles Freeny, has sued a total of 43 companies to date, and  has
convinced IBM to purchase a license to use the technology.  VocalTec Ltd.
also settled after being sued.  A company  spokesman says they're in
discussions with at least half a dozen other companies regarding settlements.
(Investor's Business Daily 4 Apr 96 A8)


                          SUN'S NEW E-MAIL PACKAGE
Sun Microsystems isn't resting on its Java -- its latest Internet e-mail
system integrates the new IMAP4 (Internet Message  Access Protocol) recently
devised by the Internet Engineering Task Force.  The new standard provides
superior support  for remote mail users.

A beta version of the Solstice Internet Mail Server is available on Sun's Web site < http://www.sun.com/ > (Information Week 25 Mar 96 p16).

## ACADEMIC SYSTEMS GETS AN A
California State University at Northridge reports a higher percentage (70%) of students are passing math classes that  incorporate Academic Systems' algebra instruction programs.  This rate compares with a less than 50% pass rate without  the programs, and several other colleges have made similar findings.  The Academic Systems product relies on CD-ROM  software that's linked to the instructor's PC, so the teacher can monitor each student's progress and step in for individual  assistance when needed.  "Before this I've always felt I never met a technology that didn't ultimately just cost me more  money," says CSU Northridge's VP for academic affairs.  (Wall Street Journal 3 Apr 96 B6)  ... See the July/August  issue of Educom Review for an interview with Academic Systems chairman Bernard Gifford.

## IBM'S INTELLIGENT MINER DIGS OUT THE GOOD STUFF
IBM plans to offer companies "data mining" software and services, allowing them to make better use of disparate pieces  of information stored in their computer systems.  The Intelligent Miner software will be available on IBM's RS/6000  servers by the fall, and on other platforms by year end.  The company also plans to develop Intelligent Decision Server  software for local area network-based information analysis.  (Investor's Business Daily 3 Apr 96 A9)

## CYRIX JOINS PC WARS
Microprocessor maker Cyrix Corp. is building a line of PCs based on its 6x86 chip, priced in the $2,400 to $5,200 range.  The computers are targeted at power business users, small businesses and home offices, and will come equipped  with Windows 95 or NT.  The company is using a direct sales strategy, similar to Gateway 2000 and Dell.  (Investor's  Business Daily 3 Apr 96 A8)

## AT&T COLLEGE NETWORK
AT&T has launched a new Web site aimed at helping college students find a job.  The AT&T College Network <http://www.att.com/college/ > provides links to other Internet job listing sites, along with tips on job-hunting and career strategies.  A recent AT&T poll shows 80% of college students plan to use the Internet as a job search tool.   (Investor's Business Daily 4 Apr 96 A4)

## POLICING THE WEB
PICS (Platform for Internet Content Selection), a new technology for filtering out objectionable material on the Word  Wide Web to prevent its access by children, will be launched this month by the World Wide Web Consortium, a  nonprofit association of academics, public interest groups and computer companies.  Similar to V-chip technology, PICS  will allow parents to provide different  levels of access for children of different ages. (Ottawa Citizen 2 Apr 96 A9)

## TV CHANNELS FOR EUOPEAN PC USERS
The National Broadcasting Company hopes to develop -- probably in partnership with Microsoft -- a number of European  TV channels that would offer a mix of educational and promotional material of interest to computer users. (Financial Times 3 Apr 96 p16)

## PERSONAL NEWS NETWORK
The Canadian Broadcasting Company, in partnership with Bell Canada, Telesat Canada, Newbridge Networks, Oracle  Corp. and Televitesse System, is trying to develop a news service that would scan television and other sources

according to user specifications, then save articles for viewing later on a personal computer. The target market for the Personal News Network will be companies and government agencies that want news in selected fields. (Montreal Le Devoir 2 Apr 96 B2)

### IBM EXECS IN ARGENTINA CHARGED WITH FRAUD
Five current and former executives of IBM's subsidiary in Argentina have been charged with offering bribes to win a $249 million contract with that country's national bank. IBM itself has not been charged, and an IBM spokesman says the indicted executives failed to follow "established IBM business procedures." (Financial Times 4 Apr 96 p14)

Edupage is written by John Gehl (gehl@educom.edu) & Suzanne Douglas (douglas@educom.edu).
Voice: 404-371-1853, Fax: 404-371-8057.

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INFORMATION TECHNOLOGY CONFERENCE
The CAUSE organization's annual conference on information technology in higher education is scheduled for the end of this month in New Orleans. The conference will bring together administrators, academicians and other managers of information resources. For full conference information check out <http://cause-www.colorado.edu > or send e-mail to conf@cause.colorado.edu.

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Kids Computing Corner
Frank Sereno, Editor

The Kids' Computing Corner
Computer news and software reviews
from a parent's point of view

In the News

Reader's Digest Home Repair CD-ROM

Reader's Digest and Microsoft have jointly produced the Reader's Digest
Complete Do-It-Yourself Guide on CD-ROM.  Based on the best-selling Reader's
Digest New Complete Do-It-Yourself Manual, this program for Windows 95
includes over one thousand photographs, sixty-five videos, fifty-five
animations and thirteen hundred illustrations.  It features twelve guided
project tours, step-by-step "action how-tos" and printable instructions (very
handy for when you can't take the computer to the job site).  Other features
of the program are a built-in estimator, a search engine for finding
information quickly, and it even gives advice on when to call for
professional help and how to prepare your home for sale.

Reader's Digest Complete Do-It-Yourself Guide is scheduled to be available
for retail sale on April 11 wherever Microsoft products are sold.  The CD-ROM
can also be purchased directly for $39.96 by calling 1-800-213-8900.

Reader's Digest is sponsoring a special promotion on America Online.  Through
Father's Day, June 16, visitors to the do-it-yourself site can register to
win copies of the CD-ROM in weekly drawings.  At the conclusion of the
contest, the first-prize winner will receive $1000 worth of American Online
time.  Use the keyword Readers Digest to navigate to the contest site.

National Geographic to Go Online

The National Geographic Society and Magnet Interactive Communications (MIC)
have developed an interactive web site to be available on the World Wide Web
and on CompuServe.  The site will open on June 20 and will content-intensive
and interactive.

Web surfers will be able will not only be able to view National Geographic's
many resources, but they will also be able to role-play in virtual
adventures.  Users will be able to seek sunken treasure in simulated dives,
take mountain treks in the Peruvian Andes, learn about photography or play
educational games.  They will also be able to communicate with the expert
staff of National Geographic's publications.

Edmark Announces Special Offer for Imagination Express

Edmark has released two new additions to the Imagination Express software
series.  Destination: Time Trip, USA and Destination: Pyramids  were created
specifically for school use.  Children in kindergarten through eighth grade
can use these programs to create interactive electronic books or beautifully
illustrated printed works based on the theme or destination of each program.

All Imagination Express software is available on dual-format CD-ROM's for Windows and Macintosh computers.

Destination: Time Trip, USA follows the chronological advances in a fictional New England village.  Children can travel through time to see the village in its infancy in the 1600's on to the present day.  They will see accurate representations of fashion, architecture, inventions and entertainment during each period.  An electronic Scrapbook gives perspective on certain dates in history through letters, news clippings and other information.

Travel back to ancient Egypt in Destination: Pyramids.  Children explore the varied scenes and lifestyles of Egyptians during the days of the pharaohs.  Story settings include a temple, a palace and a village.  An electronic Fact Book contains dozens of pages of information about Egyptian culture.

The greatest benefit of Imagination Express is the creativity it inspires in children.  Writing and communication skills will be enhanced.  Children can also learn about history, culture and environmental concerns in the themed Destinations.  Each Destination comes with the complete Imagination Express authoring software.  You can purchase any individual Destination and be ready to begin producing electronic books without having to purchase a master program or additional software.

Destination: Time Trip, USA and Destination: Pyramids will be available as school versions for the special price of $29.95 through June 30, 1996.  All other Destinations are on sale also. (Destination: Castle is my son's favorite!)  School versions include a Teacher's Guide in a three-ring binder that includes lesson ideas, activity sheets, toll-free technical support and a lifetime disc warranty.  These can be purchased directly through Edmark Customer Service by calling 800-691-2985 or you can contact your local educational dealer.

Activision Uses New Video Technology to Enhance Games

Spycraft: The Great Game and Zork Nemesis offer full-screen, full-motion cinematic video through the use of TrueMotionr, a software-only video compression technology created by Duck Corporation.  This video algorithm can be used without dedicated decompression hardware across all platforms including PC, Macintosh, UNIX, 3DO, Sega Saturn, Sony PlayStation and new systems.  This technology promises to give gamers the most realistic video seen to date.

New York-based Duck Corporation was founded in 1992 to develop TV-quality video playback and interactivity on computer and videogame platforms.  Its other core technology is Comprendingr,  a technique which combines compression, rendering and blue-screen techniques to create realistic, 3D applications.

#   #   #

Battlefield Warriors
MSRP $14.95
for Ages 8 to Adult
Memorex Software Series
N-TK
18000 Studebaker Rd
Suite 200
Cerritos, CA 90703
310-403-0043

```
                        Program Requirements
                          OS:           DOS 5.0
                          CPU:          386/33
                          HD Space:  8 MB
                          Memory:    2 MB
                          Graphics:  VGA, 320 x 200 with 256 colors
                          CD-ROM:  single-speed
                          Audio:       8-bit sound card
                          Other:         mouse, joystick
```

reviewed by David H. Mann

Battlefield Warriors is a collection of three games, Jetfighter 2 Advanced
Tactical Fighter, Project X, and Operation Combat 2. The three games install
on your hard drive.  With a few modifications to your memory (for each one)
and CPU speed, you're ready to go (almost).

Jetfighter 2 was the most worrisome of the bunch. It would not run on a 486
DX2 66 in turbo mode.
It had some problems with some of the TSRs used in normal DOS operations
(smartdrive and the CD-ROM drivers in particular). Even after all that, the
game locked up a few times. The vga colors were basic (16 colors), but
graphics were tight. As flight simulators go it was OK, but I found the
controls confusing.

Project X is a space side shooter reminiscent of the old Atari 2600. There
are various enemies with a boss at the end of each level. The attack angles
are varied and quick, but the game is only 16 colors. It also needs expanded
memory, so you'll have to play with DOS again. The game will hold the
attention of a first time gamer, but not an experienced one.

Operation Combat 2 is a boardgame-like strategy game that pits one army
against another. Players can play via modem, head to head, or against the
computer. There a time limit, but you can make as many moves as possible in
the amount of time given. The game is played on a map and moves are made with
a mouse on the action area of the map.  You can see the results of your moves
in actual animation. The graphics are blocky and again there are only 16
colors, but its fun to see if you can make more moves than the computer in
the amount of time given.

Together, Battlefield Warriors is a good starter set for someone who is new
to gaming and has an older system.  But for someone who wants high powered
graphics and blistering sound effects, you won't find it here. However if you
are nostalgic and like the older graphics and shy away from realism, this
might be the perfect collection for you.

                            #    #    #

                Carmen Sandiego Junior Detective Edition
             Dual-format CD-ROM for Windows and Macintosh
                      approximate retail $40
                          for ages 5 to 8
                        Broderbund Software
                        500 Redwood Blvd.
                        Novato, CA 94948-6121


                        Program Requirements
     IBM                                    Macintosh
OS:           Windows 3.1, Windows 95       OS:           System 7.0.1
CPU:          386DX/33                       CPU:          68030/25
```

```
HD Space:  1 MB                                HD Space:  N/A
Memory:    4 MB                        Memory:    5 MB
Graphics:  640 by 480 with 256 colors                    Graphics:
256 colors, 13" monitor
CD-ROM:  Double-speed recommended           CD-ROM:  Double-speed
recommended
Audio:        8-bit Windows compatible sound card
Other:        mouse                           Other:        printer,
microphone
```

reviewed by Frank Sereno


Carmen Sandiego Junior Detective Edition is a delightful game of exploration
and deduction for children ages five and up.  This simplified version of the
Carmen Sandiego game engine enables younger children to discover the
countries and cultures of the world as they apprehend the criminals of
V.I.L.E.

You have joined the ACME Detective Agency.  This organization fights crime
around the globe.  An evil crime cabal named V.I.L.E. is constantly stealing
the treasures of the world.  Your duty is to track the criminal, then capture
him and return the treasure.  You will have several assistants who will aid
you in your quest.  Acme photographers will attempt to capture an image of
the dastardly fiend you are chasing.  Zack and Ivy, a brother and sister
detective team, will help you to decipher the clues.  Occasionally, your
boss, The Chief, will lend assistance over the video phone.  Stretch the
crime dog will help you make the collar!


You will accomplish your mission through the use of a unique computing
device, the GizmoTapper.  The Tapper's most important feature is Dee Jaye,
the built-in voice of the unit.  She will provide narration for your
adventure and she will give hints and help when you click her call button.
The Tapper includes a large view screen, the Location Window,  to display
maps or the view your current location.  The cursor becomes a magnifying
glass when passed over the screen to help you look for clues.  The Tapper
displays a row of magnifying glasses beneath the Location Window.  These
indicate the number of clues to found at this location.  Unfortunately, your
Tapper is battery powered.  Pay attention to the battery meter.  If you take
too many wrong turns, you will run out of energy and the criminal will go
unpunished.  The Map Button will place a map on the Location Window.  You
just need to compare the symbols for the clues you have found to the symbols
next to each country and pick the one that matches.  Click on the country and
away you go!

The Tapper has three more features.  The video phone is your link to The
Chief.  He offers advice and praise, but if you leave the Tapper alone for a
few minutes, he will remind you to get back to your assignment with sometimes
unfriendly remarks.  The Photo-Fax machine receives the photographs from your
field team.  Unfortunately, they only get part of the image at each country,
so you must put the pieces together on the wanted poster.  Once you complete
the puzzle, the criminal will be identified and a warrant will be issued for
his arrest.

The interface is a very easy point-and-click design.  Online help is built in
with Dee Jaye.  The user manual is quite thorough and also has activity pages
to continue the learning fun.  Broderbund includes a small troubleshooting
pamphlet with the documentation to help solve any technical glitches.  If
that is unsuccessful, help is available for free via phone, U.S. Mail or the

Internet.

The graphics are excellent.  The animations are smooth and character's movements are very natural.  The full screen animation of the criminal's capture is equal in quality to most Saturday morning cartoons.  The still photography is quite beautiful.  Carmen Sandiego Junior Detective Edition features wonderful voice characterizations, amusing sound effects and a wonderful collection of cultural music.

The game  is  fun and easy to play.  The amusing animations will  make  your entire family laugh.  With over fifty crimes to solve, your child will  spend many  hours  playing  Junior.  The game provides  lessons  in  geography  and culture  as your child learns the location of countries on the world map  and gathers  clues  about  their  products and climate.  The  game  also  builds memorization  skills  as  he  must remember the clues  to  pick  the  correct destination.   In  higher levels, players have to remember as  many  as  four clues.

Broderbund always provides excellent value in their products.  In addition to a  reasonable price, the company backs its products with a fantastic  ninety-day  satisfaction  guarantee  and free technical  support.  Carmen  Sandiego Junior  Detective  Edition is a fine value.  This program  will  educate  and amuse your children for many hours.  Don't be surprised if you don't find  it to fun too.  I know that I do!

<div align="center">

Ratings

</div>

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            Graphics . . . . . . . . .  9.5
            Sound . . . . . . . . . . 10.0
            Interface . . . . . . . .   9.5
            Play Value . . . . . . . .  9.0
            Educational Value . . .  8.5
            Bang for the Buck . . .  9.5
            Average . . . . . . . . .  9.33
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Portable Computers Section
Marty Mankins, Editor

ACCESS Software NewsWire STR Focus

<div align="center">

It's Official -- LINKS LS

</div>

Coming Soon!
Access Software Inc. President, Bruce Carver has announced that the company's eagerly-awaited next generation golf product, LINKS LS, will begin shipping May 28th. Access has taken the software industry's most popular series of golf simulators, and totally re-designed the golf engine, adding enhancements that bring everything to the game but fresh air and sore muscles. LINKS LS, the most visually stunning and physically accurate computer gaming experience

ever developed, has raised the standard by which all entertainment products will be judged. LINKS LS now boasts graphics resolutions up to 1280 X 1024 in 16 million colors and 1600 X 1200 in 65 thousand colors! "Users will be absolutely captivated by the realism on their computer monitor -- that's our pledge!" said Carver.

"As a sign of our conviction that the newest version of our series will be a gaming paradigm for years to come, the acronym 'LS' was added to the name. The letters 'LS' stand for LEGENDS IN SPORTS." Added Carver. "LINKS has always set the industry standard, and we're proud of the great advances in 'LS', which will carry on the tradition. The advanced technology of the LINKS LS series will stun players both visually as well as in the nuances of play."

KAPALUA RESORT
LINKS LS features the Kapalua Resort in Maui as its 'home' resort. LS users may play either the Plantation or the Village course. Included are special multi-media presentations of many highlights of the area. Of special note is that LS owners may explore the clubhouse with full 360 degree movement via Access' "Virtual World Engine" (first used in the smash hit "Under A Killing Moon").

ARNOLD PALMER
Included with LINKS LS is the first in the 'LINKS Tour Player' series featuring golf legend Arnold Palmer at the La Trobe Country Club. The user may play as 'Arnie' or with 'Arnie'. The golfing escape at La Trobe is heightened with a multi-media tour-de-force, including an in-depth look at Arnie's personal library and workshop!

ADDITIONALLY:
´•    User selectable "camera angles" to view each shot. Up to four cameras
  may be selected.
´•    With the modem or network play feature, users can play with a partner
anywhere in the world!
´•    Several modes of play, including Stroke Play, Match Play, Best Ball and
Skins.
´•    "Live Action" stereo sound that automatically tracks the action.
´•    Dozens of additional equally exciting features.

COMPATIBILITY
Of course the new LINKS LS will be compatible with all existing LINKS 386 Pro courses. In addition to the Links Championship Course series two extra course series will be available with the LINKS LS: The TOUR PLAYER SERIES and the RESORT SERIES.

                        The Pandora Directive

The government has hidden the 20th century's greatest secret...
                              Until Now.
It's April, 2043 and you--as Tex Murphy, the last of the old-style gumshoes-- find  yourself racing against time in the most dangerous game of  your  life. What  is  the truth behind the rumored UFO crash at Roswell, New Mexico?  Why did the military suddenly shut down and seal off the Roswell complex? And why the frequent references to the lost Mayan civilization?


It  starts  out  like a thousand other cases. $500 a day (plus  expenses)  to track  down  a  missing  person. As you pick up Thomas  Malloy's  trail,  you realize  you're  not the only one looking for him. By the time  you  discover that  he's  ex-military and knows what really happened on July 6, 1947,  it's too late. The government's biggest secret of the twentieth century has gotten

loose and you're trapped in a deadly game of cat and mouse with the most
powerful and ruthless agency in the world. Welcome to Access Software's
latest Tex Murphy Interactive Move

The Pandora Directive


An outstanding Hollywood cast, starring Barry Corbin (Northern Exposure, War
Games), Tanya Roberts (View to a Kill, Beastmaster), and Kevin McCarthy
(Invasion of the Body Snatchers, Just Cause).
The Pandora Directive features
   ´•     Access Software's unique "Virtual World" engine. Step into a completely

       interactive three-dimensional world, and explore with full freedom of
       movement.
   ´•     The most replayability of any interactive movie to date. Follow any of
       three paths through the story leading to seven different endings. On each
       path you'll see unique scenes, new puzzles and plot twists.
 ´•     Cinematography and direction by Hollywood editor/director Adrian Carr
(Quigly Down Under, Man from Snowy River, Sex, Lies and Videotape).
Two levels of play. The first level offers a complete on-line hint system  to
help  you  through the tougher puzzles. The second level--for expert gamers--
has  no hints available, but rewards players with higher bonus points,  extra
puzzles and multiple solutions.
                    Coming soon to a software store near you!
                         Second Quarter 1996.




STR Special Coverage


             A TRAGIC STORY ABOUT A WIRETAP

by Shabbir J. Safdar, VTW Board (New York, NY)


This week most of VTW's staff attended the Computers, Freedom, and Privacy
conference in Cambridge Massachusetts.   I go to the conference every year to
recharge my batteries, put names to faces, and enjoy the synergy that can
only come  with face-to-face dialogue.

This year the debate over encryption seemed focused on three panels, the only
novel one being a panel which was a  "moot court".  Presided over by five
real Federal judges, attorneys for plaintiffs and the government argued over
the  Constitutionality of a mock law that would require escrowing of
encryption keys.  Aside from this, the conference added  no new material to
the encryption debate.

One valuable experience happened on the way home, however.  I picked up the
New York Times and came across a story  in the New York Times Magazine about
a corrupt New Orleans police chief, and how he reacted to a woman who filed
a police brutality complaint against him.

The story goes this way: the FBI was wiretapping a number of New Orleans
police officers who were allegedly guarding  a 286 pound shipment of cocaine.
During that time the FBI overheard a conversation between the police chief
and several  other police officials that the FBI alleges was a murder plot.
The intended victim had previously filed a police brutality  complaint
against the chief.

Although the FBI had the conversation in hand, they were unable to decode the

police chief's "street slang and police  jargon" in time to prevent the murder.  The woman who filed the complaint, a 32 year old mother of three, was shot  while standing in front of her house.

It's easy to be angry about this incident.  One could (and should) be angry with the murderers and their conspirators.   However out of this comes two important observations on the encryption policy debate.

One, while wiretaps have probably been effective in other cases, they were not effective in this one.  While we can grant  law enforcement the benefit of the doubt in other cases, the existence of this one shows that a wiretap is not the "silver  bullet" of law enforcement that we have been led to believe.

Another observation that can be made is that this parallels the key escrow debate very closely.  No reasonable person is  objecting to the FBI's right to conduct a wiretap.  However what is being debated is the extent to which individuals and  law enforcement can go to accomplish their duties.  The Clinton Administration is striving for a world where everyone is  forced to speak in a form of encryption that is easily decoded by law enforcement.  The public and industry is striving for  a world where they continue to have private conversations.

The situational parallel to this would be if the Administration had pushed a law that requires everyone to speak on the  telephone in plain English, without slang and without any double meanings.  This is the equivalent of key escrow.

However, would this have really saved the person so tragically killed above?  Unlikely.  Individuals involved in criminal  conspiracies will continue to use whatever means at their disposal to obscure their activities from the police.  The corrupt  police chief who allegedly ordered the murder would have still used slang and code, regardless of any laws banning such  use.  He was allegedly conspiring to committ a murder, why should he care?

Such laws will, however, affect law abiding citizen's attempts to gain privacy.  Law-abiding citizens that may be  speaking to their doctors, attorneys, loved-ones, or business partners will continue to be targets of industrial espionage,  private investigators, and, in a few cases, trusted individuals abusing that trust.

This example from the New York Times Magazine (3/31/96, p.32) shows that while we can certainly give a little to law  enforcement on their arguments about the effectiveness of wiretaps, they need to give a little in the other direction on the  practicality of forcing people to speak in a law-enforcement-understandable code.  Obviously, criminals don't care about  such rules.  Since that is the case, is it really worth handicapping all technology, and exposing individuals to privacy  intrusions when such measures won't even be effective at attaining their stated goals?

You can receive BillWatch via email, gopher or WWW:

To subscribe via email, send mail to majordomo@vtw.org with "subscribe vtw-announce" in the body of the message.   To unsubscribe from BillWatch send mail to majordomo@vtw.org with "unsubscribe vtw-announce" in the body of the message.  Send mail to files@vtw.org to learn how to receive back issues of BillWatch.

BillWatch can be found on the World Wide Web at http://www.vtw.org/billwatch/ and in Gopherspace at:  gopher - p1/vtw/billwatch/ gopher.panix.com

           Citizens Internet Empowerment Coalition Trial Update No. 7
                 Evening Update -  April 1, 1996 10:00 pm ET

                         http://www.cdt.org/ciec/
                            ciec-info@cdt.org


CIEC UPDATES intended for members of the Citizens Internet Empowerment
Coalition. CIEC Updates are written and  edited by the Center for Democracy
and Technology (http://www.cdt.org). This document may be reposted as long as
it remains in total.

               ** 30,000 Netizens Vs. U.S. Department of Justice. **
                     * The Fight To Save Free Speech Online *
Contents:


1.    Evening Update - Recap of Last Day o f CIEC/ACLU Testimony
2.    How is the CIEC case fairing so far?
3.    Preview of DOJ defense - Don't worry, CDA's not too broad..
4.    Summary of today's testimony
5.    Subscription Information
6.    More Information on CIEC and the Center for Democracy and Technology


(1) EVENING UPDATE - RECAP OF FINAL DAY OF CIEC/ACLU TESTIMONY
Testimony in the battle to overturn the Communications Decency Act resumed
Monday (4/1) before a three judge panel  in the Philadelphia federal court.
Witnesses for the Citizens Internet Empowerment Coalition and the ACLU gave
the  court an overview of the availability of parental controls on Commercial
Online Services and the further illustrated the  concerns of commercial and
non commercial content providers that the CDA threatens the free flow of
information and  the free exchange of ideas online.

Witnesses testifying today included:

´•     Bill Burrington, Director of Public Policy for America Online (CIEC)
´•     Andrew Anker, CEO of HotWired Ventures Ltd. (CIEC)
´•     Barry Steinhardt, Associate Director, National ACLU (ACLU)
´•     Howard Rheingold, Author (ACLU)
´•     Stephen Donaldson, President of Stop Prisoner Rape (ACLU)

A summary of the testimony is included below.

Monday was the third and final day of testimony from Citizens Internet
Empowerment Coalition (CIEC) and ACLU  witnesses. Testimony resumes on April
12 and 15 when the Justice Department will call witnesses to defend the
constitutionality of the CDA. CIEC and ACLU lawyers will have an opportunity
to rebut the DOJ testimony during a  final session scheduled for April 26.

HOW IS THE CIEC CASE FAIRING?

The first three days of testimony have established a solid record for the
basis of the legal challenge. The CIEC legal  challenge to the CDA is based

on two arguments:

´•     The Internet is a unique communications technology, different from
  traditional broadcast mass-media, and

´•     The content regulations imposed by the CDA are not the "least
  restrictive means" of protecting children online, and is  therefor
  unconstitutional.

The court has heard testimony from Internet businesses, access providers, and
Libraries, and commercial and non  commercial content providers describing
the nature of the Internet and how it functions (including a live
demonstration of  the Net and parental control technologies), as well as
numerous examples of constitutionally protected materials which  would be
prohibited under the CDA.  The Judges, while giving little indication of
their positions, are asking numerous  questions and appear to have taken a
keen interest in the Internet.

DOJ: DON'T WORRY, THE BILL AINT THAT BAD...

After 3 days of hearings and cross examination by Justice Department
attorneys, a picture of the government's strategy  for defending the CDA is
beginning to emerge. Although we will learn much more when testimony resumes
on April 12,  the government appears to be arguing that CDA will restrict
only the most extreme sexually explicit material, and that the   defenses to
prosecution are broad and do not place undue burdens on content providers. In
other words, the terms  "indecent" and "patently offensive" should be
construed narrowly, and the defenses construed broadly.

Under this argument, the government appears to be overlooking several
fundamental aspects of past indecency cases and  the actual language of the
CDA.  In past indecency cases, including the Pacifica case which the authors
of the CDA cite  as precedent for the legislation, the term "indecent" has
been read very broadly to prohibit material even if it has redeeming social,
literary, educational, or scientific value. In addition, during the debate on
the CDA, Congress  explicitly rejected the "harmful to minors" standard,
which includes a test for redeeming value.

The government also appears to be arguing for a broad interpretation of the
CDA's defenses.  The defenses available  under the CDA provide immunity for
content provides who take "good faith, reasonable steps", including adult
access  codes or credit card verification, to restrict minors access to
"indecent" material.  Throughout the course of the  testimony, the DOJ has
asked questions of witnesses implying that implementing PICS standards or
other HTML tags  would be relatively easy for content providers, suggesting
that they believe content labeling would be a "good faith"  defense under the
CDA.  Here again however, it is important to note that the House/Senate
Conference committee  rejected parts of the White amendment which would have
created a more explicit defense for content labeling.

FOR MORE INFORMATION

CDT will continue to provide updates on the case when testimony resumes on
April 12.  In addition, transcripts of the  first 3 days of testimony will be
available on CDT's web page later this week. Please continue to visit
http://www.cdt.org/ciec for more information.

(2) SUMMARY OF TODAY'S TESTIMONY
Bill Burrington, Director of Public Policy for America Online, told the Court
that while AOL can and does exert some  control over content on its on

network, it is impossible for service providers to control content on the global Internet.   Testifying both on behalf of AOL as well as the entire commercial online services industry (including Compuserve,  Prodigy, Microsoft Network, etc.), Burrington stated that while some online material may be inappropriate for children,  "... effective protection of children from exposure to inappropriate material can only occur at the level of individual  users".

Burrington outlined the various parental control measures available on commercial online services.  On America Online,  parents have the ability to restrict their children's access to Usenet newsgroups, binary downloads, chat rooms, and other  features of the service. He also argued that the "indecency" restrictions imposed by the CDA will effectively ban constitutionally protected speech for adults and reduce online-speech to information and discourse only appropriate for  children.  Burrington argued that fear of criminal liability under the CDA could motivate AOL to remove health related  information, online forums, and other content from the service.

HotWired CEO Andrew Anker testified that some of the material available on HotWired, including a recent stories on the  poet Allen Ginsburg and the atl.sex.bondage newsgroup could be considered "indecent", but that it would be impossible  and extremely expensive for the company to verify the age of every visitor to the site. In response to a question from the  Justice Department, Anker stated, "I don't understand what indecent and patently offensive mean, or what community's  standards apply".  As a result, Anker stated, HotWired fears criminal liability under the Communications Decency Act.

Stephen Donaldson of Stop Prisoner Rape, a group dedicated to educating the public about prison rape and helping  victims recover, testified that because some of the content on his World Wide Web site uses sometimes explicit images and "street language" to describe prison conditions, he fears criminal liability under the CDA.

Similarly, Barry Steinhardt of the ACLU testified that some of the material on the ACLU's web site, including the '7-  dirty words' in the text of the Pacifica Decision, and because the ACLU hosts chat sessions on America Online, the  ACLU could face huge fines and prison terms unless it censors itself and its members. When asked if he felt that the text  of the bible or Shakespeare's Hamlet could be considered "indecent" under the CDA, Steinhardt argued that community  standards vary throughout the United States and that in some places, "That kind of material ... has been the subject of censorship" in parts of the US, and "there are many people who regard that material as Indecent."

Howard Rheingold, author and expert on the subject of Cyberspace Communities, described some of the many benefits  the online world can bring to education and a sense of community.  Rheingold argued that, although it is technically possible to restrict minor's access to MUDs and MUSEs, it is difficult to determine what material should be would be  illegal under the CDA.


2. Subscription Information
As CIEC members, you have been invited to join this list in order to receive news updates and other information relevant  to the CIEC challenge to the Communications Decency Act.

If you ever want to remove yourself from this list, send email to:    ciec-members-request@cdt.org  with 'unsubscribe  ciec-members' in the SUBJECT LINE

(w/o the 'quotes').  Leave the body of your message blank.

3. For More Information
For more information on the CIEC challenge, including the text of the
complaint and other relevant materials:

* World Wide Web                    --        http://www.cdt.org/ciec/
* General Information about CIEC     --        ciec-info@cdt.org
* Copy of the Complaint             --        ciec-docs@cdt.org
* Specific Questions Regarding the
  Coalition, incuding Press Inquiries --      ciec@cdt.org
* General information about the
  Center for Democracy and Technology --      info@cdt.org
end ciec-update.7
4/1/96


Atari Interactive - software/Jaguar/Computer Section
Dana Jacobson, Editor



From the Atari Editor's Desk            "Saying it like it is!"

     The calendar says that it's Spring, so where is it?!  It's still pretty
cold for this time of the year.  Spring fever has  definitely reached
epidemic proportions around these parts lately!  It's been pretty quiet
around these parts lately, but we  hope that will change shortly.  Our U.K.
friends have some projects in the works that we'll be passing along to you in
the  coming weeks.

     In the meantime, let's see what's on tap for this week in the grand
world of ..all things Atari.

Until next time...



                  WWW 130 RELEASED (mkII)

From: Nicholas Flintham

Well since my first post doesn't seem to have been sent properly (demon
loosing news articles again?) here is another  announcement of the
availability of WWW130.

It has the following included with it:

´•    STiK, originally by Steve Adam (Australia) and now by Dan Ackerman
  (USA). This does the low-level networking stuff to the Internet.
´•    CAB, by Alexander Clauss (Germany). The HTML/WWW browser.
´•    CAB.OVL, originally by Tim Newsome (USA) and now by Dan Ackerman (USA).
  This is the missing link between STiK and CAB.
´•    Antmail, by Dan Ackerman (USA). A POP3 based E-mail program.
´•    Telnet, by Jim Baumgardner and Dan Ackerman (both USA). This is a remote
login terminal program.
´•    Setup, by Guy Harrison (UK). Sets up STiK for you with no hassles
guaranteed.

```
Stik is at version 1.08
Cab at 1.1a
Cab.ovl 1.12
Antmail 0.7.4
Telnet 1.01
Setup 000
```

You can find them at the following places:

                My web page (http://www.unn.ac.uk/~cju920/)
                       Hensa (replaces old www116)
                  ftp.uni-kl.de (pub/atari/incoming)

I also tried to upload to ftp.cnam.fr and atari.archive.umich.edu but ran
into problems. I may try again later.

                  <     Nicholas Flintham      >
                   >  Nick@Flinny.demon.co.uk     <
                  <      N.P.Flintham@unn.ac.uk         >
                >   Http://www.unn.ac.uk/~cju920/   <
                 >  Falcon 030/4/1160/FPU/LINUX    <


                            Jaguar Section

Battlemorph Review!  Atari Games Sold!
Defender 2000 & NBA Jam TE Tips!
Yak Does VLM!
And more!



From the Editor's Controller  -  Playin' it like it is!

     A lot of interesting stuff for you this week.  Reviews are starting to
be finalized and we've included one for Battlemorph this week.  The sale of
Time Warner Interactive (formerly Atari Games) has been finalized and
Williams now owns it.  Ever want to be able to edit your own effects for the
Jaguar VLM?   Now you can with some useful tips from the VLM master himself,
Jeff Minter.

     How about some Defender 2000 tips?  Or tips for NBA Jam TE?  We've got
them for you in this issue!  And more on the way!

     I'll let you continue reading while I throw in a Jag CD and resume the
"battle"!

Until next time...


Industry News STR Game Console NewsFile  -  The Latest Gaming News!

                WMS Industries completes acquisition of Atari ...

CHICAGO (April 1) BUSINESS WIRE -April 1, 1996--WMS Industries Inc.
(NYSE:WMS) announced today that on  March 29, 1996 it completed the
acquisition of Atari Games Corporation, an indirect, wholly-owned subsidiary
of Time  Warner Inc. (NYSE:TWX), for a minimum purchase price of
approximately $9.8 million and a maximum of $23.8  million based upon gross
profit of the Atari business over the next four years. The purchase
consideration consists of $2  million in cash and the balance in non-recourse

notes.  The acquisition substantially increases WMS' pipeline of coin-operated arcade games and home video games and further strengthens the Company's industry-leading design and engineering capabilities with the addition of Atari game designers who will be based in Milpitas, California. The  additional arcade and home video game  offerings provide WMS with opportunities for design, engineering, manufacturing, and marketing efficiencies and economies of scale which should enhance the operating performance of the combined company. Atari has been responsible for creating arcade and home video games such as Pong, Asteroids,  Primal Rage, Area 51, Centipede and Missile Command. WMS expects to release home versions of Atari's extensive  library titles in "greatest hits"  formats in addition to developing, marketing and distributing new Atari games. Headquartered in Milpitas, California, Atari Games is a developer, manufacturer, marketer, licenser and publisher of coin operated video arcade games under the Atari(R) name and interactive electronic and game entertainment products for  use with home video games currently marketed under the Time Warner Interactive name. Atari Games/Time Warner Interactive is a licensee and publisher for Nintendo, SEGA, Sony, Jaguar and 3DO and personal computer CD-ROM platforms.  No rights to the names Time Warner or Time Warner Interactive are included in the transaction.  Atari  Games is not related to Atari Corporation, the manufacturer of the Jaguar home game systems. WMS Industries Inc. is  engaged in the design, manufacture and sale of coin-operated amusement games, home video games, video lottery terminals and gaming devices, and the ownership and operation of hotels and casinos.

CONTACT:

<div align="center">

WMS Industries Inc.
Harold H. Bach, Jr.
312/961-1111
or
Jaffoni & Collins Incorporated
Joseph N. Jaffoni
212/505-3015

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New Version Marks SimCity Milestone

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Maxis Inc. is celebrating the sale of the 3 millionth copy of SimCity/SimCity 2000 with the release of SimCity 2000  Special Edition.  The "celebration edition," packaged in a silver foil box, contains 100 new building graphics, ranging   from a circa- 1930 ballpark to a space-age skyscraper. A video interview with SimCity designer Will Wright, provided on the CD-ROM, offers an insight to the history and future of the "Sim" game family. Also included is the City 2000 Urban  Renewal Kit, which permits players to design their own buildings, and 10 predesigned scenarios.  "SimCity mania has  become an international phenomenon," says Sam Poole, president of Maxis. "Just recently, the National Youth Council of Singapore included a copy of SimCity 2000 in a time capsule representing national youth culture. We hope the special  edition will add new fans to the millions who have enjoyed SimCity and SimCity 2000 worldwide."

SimCity 2000 Special Edition is available in a DOS/Windows 3.1/Windows 95 hybrid version and a Macintosh/Power  Macintosh version. Each version is priced at $49.95.

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Apple Releases Game Kit

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Apple Computer Inc. has released Apple Game Sprockets, a new software development kit (SDK) that aims to help game  developers create advanced multimedia and Internet-enabled games for Mac OS-based computers.  According to Apple,  Game Sprockets lets developers design games that can feature real-

time 3-D graphics, 3-D sound, Internet support,  speech recognition and input
device/monitor control. The kit also includes the final release of QuickDraw
3-D RAVE  (Rendering Acceleration Virtual Engine), a multiplatform technology
that enables game developers to incorporate plug- and-play 3-D acceleration
hardware into their programs.

"The business of making great games is a classic example of evolution -- you
get cooler quick, or you get left behind,"  says Ben Calica, senior product
manager of game technologies at Apple. "Our job is to provide developers with
unique,  game-centric technology that shows off the power of the Macintosh by
helping them create the hottest titles on the  market."  Game Sprockets is
available royalty-free to all developers, says Apple.

### NTN, CompuServe in Game Deal

NTN Communications Inc. has signed a deal with CompuServe Inc. to provide at
least 24 interactive games to  CompuServe during a two year period.  NTN's
Countdown, an online trivia show, and QB1, an NFL-licensed play-a- long
football game, will headline NTN's product menu for CompuServe. The games are
set to debut in May. The deals  terms weren't disclosed.

"This agreement with NTN is an important step in the evolution of
CompuServe's game strategy," says Srini Vasan,  CompuServe's director of
games, chat and conference. "We are very excited about our new relationship
with NTN  because 'Two Way' (interactive) games are very attractive to the
global online audience."  "We are confident that as fast  as the consumer can
access NTN products at home, the growth in demand will be exponential," adds
Dan Downs, president and chief operating officer of NTN, which is based in
Carlsbad, California.


Jaguar Game Title STR Review  -  "BattleMorph"

                         "BattleMorph"

By Thomas Sherwin

Published by: Atari
Price: $59.99


If you're a "long-time" Jaguar owner, you probably had no choice in getting
Cybermorph with your system.  I don't  know about many others, but I found it
a cute pack-in yet hardly something that I would buy if it was sold
separately. Great... fly around and pick up pods.  OK graphics, kinda lame
sound FX... it could have been so much better.

BattleMorph is the attempt to make Cybermorph what it should have been from
the start.  Some of the premise hasn't  changed: fly around to different
systems and complete your objective on each planet.  You still have your
cyber-buddy  Skylar to say a few words.  And each world is still "fly
anywhere" scenario (i.e. you're not "on rails").  And here's where the
similarities end...

BattleMorph gives you more things to do on each planet.  Sometimes you have
to set off a detonator and get off the planet  before it's too late,
sometimes you have to collect data pods (OK, SOME things are the same), and
sometimes you have  to destroy objectives (usually an enemy base of sorts).
To hinder you in your quests, there are obstacles like force fields,  portals
which can only be opened by hidden keys, and enemies galore.

Not only can you fly around in the "open skies", BattleMorph adds the ability
to go underwater.  There are still enemies  down below, too, so it isn't
always a sanctuary.  Some water actually "heals" you, some water hurts.
There's also  underground tunnels to fly through, and they can be stocked
with more enemies.  Maybe you need a key to get in.  Maybe you just need to
shoot through the door.  It's up to you to figure it out.

Graphics:
Not exactly system-selling, but a vast improvement over Cybermorph. The
landscape is still gouraud shaded, but doesn't  "pop" into view as
drastically as CM.  There's a smattering of texture mapping with the enemies
and the buildings  (tastefully done, too).  The frame rate has improved
slightly and made those "major" encounters a little easier to deal  with.
There's still some slowdown, but the game is quite playable 95% of the time.
Given the graphics are more  complicated and there's usually more stuff going
on all at once, it's obvious the graphics engine from CM was either
seriously rewritten or replaced.

The most noteworthy graphics effect is when the ship goes underwater.  The
screen "waves" like a cheesy "dream scene"   from the Brady Bunch.  But it's
actually pretty cool (in this context) and doesn't seem to affect the frame
rate in the least.   And the transition from land/sea/tunnel is
instantaneous.  The explosions are vaguely Iron Soldier-ish and replace the
same cheesy bitmap fireclouds in CM.

And since BM comes on CD, they have to add the obligatory full motion video.
The scenes are limited to the beginning  of the game (where a Sean Connery
sound-alike tells you the story) and to the send-to-planet/come-back-from-
planet  sequences.  If these annoy you, you can turn off the FMV from the
options screen or just press "Fire" to interrupt it.   Regardless, the FMV is
all computer generated and goes quite smoothly.  It shows off what the Jag
can do when someone  takes the time to do a good job.

Sound FX/Music:
Yes, Skylar is still there... and her voice doesn't seem to have changed
much.  But she's not around as  often and doesn't get on your nerves.  But if
you wait to long to move (or do anything), she calls out "Helloooo?" and
"Ready when you are."  Glad to see she hasn't lost that rapier wit (remember
"Where did you learn to fly?" .

Like CM, most of the sound FX are pretty innocuous.  Not good, not bad, just
there.  But there's now some background  music which changes according to
your locale (the music is different for land, sea, and tunnels/underground
rooms).  I  actually like the music and think it should have been in CM, too.
Your mileage may vary according to your tastes. Should you not like it, you
can turn it off.

Control:
Very similar to Cybermorph.  Thankfully, you can select your "special weapon"
using the keypad instead of having to  cycle through using the Option button.
But all of the other controls are the same.  One step backwards is when you
use  reverse.  In Cybermorph, just tapping on reverse would either slow you
down just a little bit or make you go backwards  for a short distance.  In
BattleMorph, it seems that a tap can sometimes get out of hand and bring your
ship to a halt or  send it careening backwards into a canyon wall (or worse).
I wish it weren't so sensitive and I still can't get it right.
I don't know how well it does with the Pro Controller.

Manual:
It spends way too much space showing you the enemies and not enough time

outlining what you can actually do.  This  doesn't really hurt your ability
to do well since there's a mission briefing before each planet and always a
"hint capsule"  once you get there.  Still, it would be nice to have more
explanation about your objectives.  You probably won't even need to read it.

Entertainment:
To me, this is the area that is the greatest improvement over Cybermorph.  On
the bad side, after playing six or seven  planets, it starts to run out of
variety of what your main objective it.  But on the good side, how you get to
your objective   is always a challenge.  Maybe you just need to find the
right tunnel.  Maybe you need to get a key to turn off the power  station to
turn off the force field to get the key to the tunnel... ad infinitum.  Each
world is a different "puzzle" to solve  and as you progress in the game, it
takes longer and longer to complete each world, even if you know where you
need to go.

There's still the bonus world for each system where you can stock up on free
weapon reloads.  You just have to find the  magic tower on the right planet
and blow it up.  Free ships are given out as "prizes" in the worlds, not
according to your  point total.  And there is a greater variety of weapons
available for your War Griffon.  Before each planet, you get to  select four
weapons out of whatever ones you've collected, one for each "weapons bay".
Unfortunately, you can't load   more than one bay with the same weapon.

Between the puzzle aspect of finding everything for your objective and the
strategy of picking the right weapons for the  right situations, BattleMorph
has finally succeeded in being a competent "fly anywhere" game.

Odds and Ends:
One thing that I noticed was the relatively quick load times from the CD.
There's virtually no long waits whilst the game  loads, even if you interrupt
the FMV sequences.  Maybe it's just how they arranged the data on the CD, but
whatever it  is, more developers should do this (I wish Primal Rage could be
like this).

And since it's a CD game that goes on for a LONG time, the Memory Track is a
must-have.  It saves your score, number  of ships, and weapons inventory.

                        Graphics:                     8.0
                        Sound FX/Music:          6.0/8.0
                        Control:                      7.5
                        Manual:                       5.0
                        Entertainment:                8.5
                        Reviewer's Overall:       8.5

Summary:
If you never liked these kinds of games, BattleMorph may not change your
mind.  There's nothing SO outstanding about  it to make you go "Holy Moly!".
If you like Cybermorph's game "genre" but didn't like CM, give BattleMorph a
try.   You'll probably think like I do: THIS is what Cybermorph should have
been from the start.  But if you even remotely  liked Cybermorph, BattleMorph
is a must buy. The improved graphics and enhanced gameplay will keep you
coming  back for more for a long time to come.

Jaguar Cheats, & Hints STR InfoFile  -  Solving Those Riddles!

                        NBA Jam! TE Tips!!

Codes to be entered at the "TONIGHT'S MATCH-UP SCREEN":

´•     Big Head - Up,C,A
´•     MiniHeads - Up,Up,Up,B,C,A,A,A,A,A
´•     Slippery Court - B,A,Down,A,B,Right,Right,Right,Right,Right


Secret characters to be entered at the "ENTER INITIALS SCREEN":

´•     Larry Bird - enter 'BRD' with these buttons while holding down OPTION,
  in this order: 'ACA"
´•     Suns Gorilla - enter 'GOR' with these buttons while holding down OPTION,
  in this order: 'BB*', * = use any key without OPTION to enter the 'R'.
´•     Mike D of the Beastie Boys - enter 'MKD' with these buttons while
holding down OPTION, in the order: 'C*C', * = any key without OPTION to enter
'K'.
´•     AdRock of the Beastie Boys - enter 'ADR' with these buttons while
holding down OPTION, in the order: 'BC*', * = use any key without OPTION to
enter 'R'.
´•     MCA of the Beastie Boys - enter 'MCA' with these buttons while holding
down OPTION, in the order: '*BB', * =  use any key without OPTION to enter
'M'.
´•     Adisak, Jag programmer - enter 'ALP' with these buttons while holding
  down OPTION, in the order: 'CBA'.
´•     Phil Gelber, Lead Tester - enter 'FIL' with these buttons while holding
down OPTION, in the order: 'BAB'.
´•     Leonard Tramiel, Mr. Atari - enter 'LAT' with these buttons while
  holding down OPTION, in the order: '*CB', * = use any key without OPTION to
  enter 'L'.

<div align="center">Hints for Defender 2000</div>

Classic Mode

´•     This is pretty much identical to the original arcade version of
  Defender.  Fast reflexes and superb coordination are two things that will
  take you far in Classic Mode.
´•     On higher levels, learn to perfect the art of protecting one or two
  Humanoids and carrying them on your ship at all  times.  If all the remaining

  Humanoids are on your ship, then you don't have to worry about your planet
  exploding since  the Landers will have nothing to pick up!

Plus Mode

´•     Be sure that when playing Plus Mode, you always hold down the fire
  button while firing.  This will give you the  fastest possible firing rate.
´•     As in Classic Mode, on higher levels you'll want to keep one or two
Humanoids dangling from your ship as insurance  that your planet doesn't blow
up.
´•     If you haven't already noticed, the spinning cube (warp gate) spins
  faster as the number of Humanoids you are  carrying increases.  If you have
  four or more Humanoids on your ship and you fly through the warp gate, you
  will warp  the number of levels that is equal to the number of Humanoids that

  you had on your ship.
´•     Also, if you fly through the warp gate (with fewer than four men on your
  ship) while a Humanoid is being captured,  you will hyperspace to the section

  of the level where that Humanoid is being captured so that you can rescue
  him.
´•     To see a cool effect, try to fly through the warp gate when a Humanoid

is being captured on the same screen so that  when you hyperspace , you will
hyperspace directly on to the warp gate again!
´•    Don't forget about your Lightning Laser.  It doubles as a tractor beam
to pull in Humanoids if they are falling and is  extremely useful on higher
levels.

2000 Mode

´•    As in Plus mode, always hold down your fire button to achieve your
  maximum firing speed.
´•    Being able to quickly rescue a Humanoid on a level is essential to
  success.  Practice this until it becomes second nature.  Acquiring that extra

  fire power early in the level is a necessity on higher levels.
´•    Remember: The more Humanoids on your ship, the more fire power that you
  have.
´•    Humanoid's shots don't hurt other Humanoids.  Be sure and use this to
your advantage.
´•    Perfect the art of flying backwards while firing.  This is a vital
trademark of any true Defender player.
´•    Be sure and acquaint yourself thoroughly with your radar as you will
  most likely need to use that more than the game screen in order to survive.
´•    Be sure and collect those power-ups!  If you get four of the dark purple
ones, you will warp to a bonus level where  you will have the opportunity to
warp an additional five levels.
´•    Try to catch a final Humanoid as you are zooming off of a level.  This
will get you an undocumented bonus which,  when done successfully, can boost
your score to around one million by Level 10!
´•    The enemies that shoot straight horizontal lines are a pain in the butt
if you don't let them bunch together in a group  before smart bombing them.
´•    Let your AI Droid take care of the Mirror Balls for you.
´•    On levels with Pointy Fingers, be sure and keep moving.  If you stop and
wait around, you'll be finger meat.
´•    When you progress to around Level 80, beware of the Lander Generator
  ships.  They will not fire at you, but instead will generate Landers.  It may

  seem like the level never ends, but that is only because that ship is
  generating more  Landers.  Kill them quickly and early.
´•    Above all, keep at it.  Practice is your biggest ally here.  Once you're
  used to the game you should be able to  stockpile loads of extra ships in the

  early levels to get you through the tough parts later on.

Plasma Pong

´•    To "pull out" Plasma Pong, you need to enter a name of a legendary
  Atarian at the high score screen.  Hint: Think PONG!


Jaguar Online STR InfoFile     Online Users Growl & Purr!


                    YaK's Quick Intro to VLM Hacking

From: yaK <llamaman@ix.netcom.com>


Hacking the VLM - A Brief Introduction

´•     The Good News

There is a backdoor left in the VLM which allows the user to get at the edit
mode that was used to create the banks of  VLM effects.  You can get in there
and roll-your-own FX, and it's not hard to come up with stuff that is a *lot*
better than many of the default FX.

´•     The Bad News

There is no provision for saving your hacks.  They are entirely transient,
and you can wave them bye-bye as soon as you  switch to another FX bank -and
unfortunately, whenever you open the lid of the Toilet to change the CD, it
switches  banks into a special Jaguar-logo bank, and it's bye bye hacks.
Bummer, I wish it didn't do that, 'coz otherwise I'd just  leave my VLM on
all the time and evolve 9 banksworth of top hacks...

Also, the edit interface is buggy and pretty user-hostile; it's got no error-
checking and it's possible to crash the VLM, or  slow it down to a crawl, if
you tweak certain parameters out of range.  Hell, it was never intended for
end-users, only for  use by a certain deranged bovine.

´•     Why Bother Then?

Because it's fun.  Because if you're interested, you can find out a lot about
how the VLM works.  Because a lot of the  default FX are fairly non-optimal,
largely 'coz at the time I was designing the banks I had pneumonia and was
feeling like  Bovine Backscatter, and I always find that I make better FX
when I feel good.  And although you can't save the hacks,  you can do what I
do, and keep a tape in the VCR and lay down some vid whenever you come up
with a particularly nice one.

´•     How do I get there?

Easy.  Select the effect you want to base your hack on.  Then, in VLM-mode,
hold down *,1,3,0 on the Jaggi control  pad.  This should bring up a menu
called Spectrum and Triggers.   That's not it though - that was just a red
herring to  confuse people looking for the hack ;-) While on the Spectrum and
Triggers screen, press up,down,up,down... 8 times  (so the cursor wraps from
Trigger 1 to Trigger 5 and back again 8x) and then the display will change to
Edit Mode.  At that point you're in.

´•     What do I do when I get there then?

Okay, first it helps to have some idea of what is going on inside any
particular VLM setting.  Each individual setting  consists of up to six
effects, each of which can take a shitload of parameters, which define how
that effect changes over  time.  Parameters can be attached to waveform
generators, to user control from the joypad, or to the spectrum triggers to
create an audio-responsive effect.

The most common types of effect you will see in the VLM are:

Digital Video Feedback area:
DVF is what gives you all those cool swirly screen-filling patterns and
persistence fields.  It  is, however, quite an expensive effect in terms of
proc power (one is throwing rather a lot of pixels around doing scaled
rotates of the entire screen)... if you can live with a smaller DVF area on
some of the effects the speed and responsiveness of many of the effects can
be greatly enhanced.  I have a whole new class of 60Hz feedback FX that I
could kick myself for not putting in the default banks...

Draw Spectrum As Intensities:
This basically plots the output of the FFT through the symmetry generator.
On its own, or combined with DVF, this is a  good setting to use for effects
that you want to be precisely audio-reactive.  Put it over some nice DVF or a
persistence field, lovely.

Draw a Ring of Pixels:
Does just that, through the sym generator, with various parameters applied so
you can change phases, number of points,pixel size, etc... a very versatile
thing, simple though it is.

Draw Plasma:
Draws a tile of plasma on the screen.  Useful for putting in the middle of a
nice DVF field as a source effect.  Can be  programmed to flash on trigger
band events too.  Try hooking oscillators up to the XY position when it's in
a 60Hz DVF  field – yummy.

Empty slots cannot be edited.  Time was when pushing B on an empty slot would
bring up two pages' worth of FX that you could build in there, but sadly that
came out.  I wish I had never taken it out now. Damn, and I wish I had not
removed Save Bank either...

There are a few others, starfields and the like.  Play with them.  Some of
them are quite cool.

Fiddling Around With Stuff

When you press B to edit an effect, you are presented with three choices –
Edit source function, which allows you to see  and tweak the parameters that
make up the basis of the effect; Edit symmetry generator, which allows you to
twiddle with  the sym generator, for effects that go through that pipe (not
all FX do – DVF and the plasma don't use the sym gen at all,  so changing
stuff on theyr sym generator pages does nothing useful); and Edit Source
Waves.  Each effect has 8 programmable waveform generators which can be
attached to any of the parameters defining the effect or the symmetry.  Edit
Source Waves is where you go to adjust the speed, waveform etc of the
waveform generators.

Edit Source Function

If you enter this menu, you will be presented with a list of the variables
which control how that effect is displayed.  In a  DVF effect's Source
Function menu, for example, you will see parameters controlling the Window
Size, Scale, Rotate Angle, etc.  You are free to cursor around this menu,
twiddle the values, and see what happens to the  display.  (It helps to have
a CD playing while you fiddle, so that all the effects are active and you can
see what you are doing). Menu items with (X,Y) after them represent pairs of
variables.  When you select a variable to edit, you will be presented with a
slider, a 2-way slider, a position marker, or crosshairs, depending on the
effect.  Just use the joypad to change the values. Anything you change will
stay changed for the life of your hack (that is until you change banks or
open the Toilet).

While editing a variable, you may see the message 'Press * to Attach
Waveforms'.  If you press *, it takes you to the Attach Waveforms screen,
which has a totally crappy and confusing UI, but which is nonetheless the key
to the cooler  aspects of VLM usage.  It works in conjunction with the
Waveform Edit page, and in a sane and rational world, would  have been
integrated in with that page. The wonderfully-informative Attach Waveforms

screen presents two rows of the numbers 1-8. The top row represents
waveform generators linked to this variable. If one or more of these numbers
are highlighted, it means there are generators already linked to this
variable. You can attach or detach a generator to the variable by pressing
the corresponding number key 1-8. You can attach as many generators as you
like - the resultant waveform is the sum of all the input waveforms.

You also can adjust the amplitude of the waveform here. Dismally, there is
no display actually showing you the amplitude - you just have to watch the
display to see the result and kinda fish about. Also, for some inane reason,
if the waveform is attached to an X-component you adjust the amplitude with
left/right, and if it is a Y component you use up and down. I think I was
planning to put in an actual display of the waveforms here, but I got ill and
never finished it off. As it is, it's sucky and counterintuitive. Oh
well... The bottom row of 8 numbers allows you to modulate the attached
waveform(s) with the output of an envelope generated by any of the five
spectrum trigger generators. You press #, then the number of the trigger 1-5
(6, 7 and 8 are for the three joypad buttons) to toggle the trigger attach.
And for some reason, like it was never properly debugged, when you toggle a
trigger off, often the digit in the bottom row will not de- highlight. Oops.

After you have attached waveforms, you will probably want to mosey on over to
the:

Edit Source Waves

menu. Here, you can select a waveform generator by cursoring up and down.
While the cursor is on a generator, that wave is displayed in the blue box.
You can increase or decrease the frequency with A and C, and slipthe phase by
Left/Right. You can change the wave type by pressing a number on the numeric
pad. User X and User Y translate to the 'position controlled by the joypad
in VLM Interactive mode.

Edit Symmetry Generator

is a very interesting place to be for all those particle effects and anything
else that goes through the sym generator. In this menu you can twiddle,
attach waveforms to and generally piss about with everything to do with
symmetry.

The sym generator uses two basic kinds of symmetry, planar 8-way reflection,
which is quick, and rotational, which is very nice but considerably slower.
The two types can be combined. Many of the items on the Symmetry page only
apply to Rotational symmetry, and will have no effect if Rotational is
switched off.

You set the sym types under the Symmetry Type menu, not surprisingly.
Pressing 9 on this page toggles rotational sym off and on, and due to quite
possibly the same bug as on the Waveform Attach screen, often the '9' in the
middle will be incorrectly highlighted. It's usually pretty obvious when
rotational is on though. Keys 1-8 toggle on and off the planes of the 8-way
symmetry. Set up your types, and then go and have a fiddle with the
parameters as in the Edit Source Function mode.

Since you can't add or delete effects, the nature of your hacks will be in
part defined by what effect types are in the bank you choose to edit, so if
you want to do a lot of DVF stuff, try bank 3 or 4, and if you like
particles, bank 1 or 2, and so on. You can switch between, and hack, all
effects within a bank, but *if you change banks they are lost*. Be careful!

And, basically, there we have it (as I said to Flossie as I led her into the concealing darkness of the sheep-shed).  Enough  stuff to get you started playing about with VLM editing.  Apologies for the crappy UI, but I never had time to really bring it up to scratch before I got that bloody pneumonia.  As it is it was about a year between finishing the VLM code  and the release of the CD-ROM, and I wish I had been able to spend a few more months at it. Both the FX and the edit mode could have been a lot nicer!  Oh well, next time... I've already got some awesome stuff running on [closes his muzzle and remembers the three letters N, D and A] ;-)

and oh yeah, I better mention:

CAVEATS: Here Be Bugs'n'Beasties!

The error checking on the UI is at best sucky and at worst nonexistant.   It is quite possible to either choke up the VLM with some incredibly intensive sym mode that will have it doing one frame per Sunday, and you and even kill it with an honest to Ghu, thank-you-and-goodnight, little-silicon-legs-in-the- air crash.  There are a few danger areas which I shall warn you of now:

´•    Positioning a DVF window too far off the edge of the screen can kill the
   system
´•    Attaching waveforms to DVF window size and position can be fatal.  Look
out!
´•    Attaching waveforms to the Rotational Symmetry Order can cause it to
   wrap to negative, whuch translates to something greater than 32767, which,as
   a sym order, will cause the system to choke most heinously. Won't killit, but

   the frame rate will be measured in minutes per frame hehe...

Don't worry, killing the system will not do any permanent damage.  The default banks are tucked away snug in ROM and will be restored when you restart the system, no matter how badly you take it down.

Well, I shall go and post this now... have fun and Happy Hacking!

\
(:-) – the Beastly Boanthrope
/


ONLINE WEEKLY STReport OnLine        The wires are a hummin'!


                          PEOPLE... ARE TALKING

On CompuServe

compiled by
Joe Mirando
73637,2262


     Hidi ho friends and neighbors.  Well, I'm back and ready to talk (when aren't I, huh?).  I missed last week's column  because I was sick with a nasty little stomach virus.  It seems that each year this little beastie adds yet another "trick" to  its repertoire.  So take my advice folks: Avoid nieces and nephews who "got over the flu a few days ago".

     So, what's been going on the past few weeks??  As I'm sure you're aware,

Atari is blowing out some old, used, stock at  some truly incredible prices.
It's just easier for them to sell the units at rock-bottom prices than it is
to move it all to  their new warehouse.  Yes, last week's offer is for real,
but quantities are limited.  And supplies won't last long because  "they're
prices are so low they're almost giving it all away".

        I'm sorry folks, I just couldn't resist.  Let's take a look at the CIS
scuttlebutt before I say something else corny.


From the Atari Computing Forums

When, in the midst of a hardware conversation, Bill Anderson asks about my
choice for ST-related repair, I tell him:


"...I've trusted MegaByte with several machines several times and have never
been disappointed.  They do very good  work at a very fair price.

The info I have for them is as follows:

                    MegaByte Computers of North Texas
                      941 Melbourne Hurst, TX  76053
                            (817) 589-2950

I haven't had to contact Robert and crew for quite a while (I've stayed out
of my computers' guts for almost a year now  <grin>), so you might want to
give them a call and double-check the address.

A phone call will also give you an idea of what kind of folks they are. They
are quite professional and good-natured at the  same time.  I find that to be
a rare combination in the computer world.

A cute story:

Two years ago, my boss sent me to call on a customer in "nearby" Sherman, TX.
Since I had to call Robert anyway, I  asked him about the town. It turns out
that "nearby" in Texan terms means anything under 150 miles.  Sherman was
somewhere around 80 miles north, he said, and since Hurst is 15 minutes from
Dallas/Fort Worth Airport, I should  detour in that direction and see him.
When I asked if he knew anything about the town, he said "no, but hang on a
second...."  Then he called to an employee "Hey, E.R., what do you know about
Sherman?"  I heard E.R. pause for a moment and then he said "Well, he was
always very nice to Mr. Peabody!"

I guess you had to be there, but we all got a good chuckle over that.  I
never did get to make that detour and I wish that I had."

Bill, who is also from Texas, tells me:

"Yes, you do get used to that sort of thing.  I miss it when I'm away for any
length of time.  Thanks for the info.  I'll  give them a call. So, what part
of the world do you live in?"

I reply:

"I live up here in New England (Connecticut).  I can't say enough about
MegaByte.  They're great folks."  I hate to  sound like a commercial for
MegaByte, but they are my first choice for repairs.  DAK jumps in and adds
his thoughts:

"I thought I'd jump in here, being one of the Genie refugees to dive in here
after the huge rate increase over there.  At  work I use PC's still using Win
3.1 on 486/33's with a slow network (even DOS lives there!). At home I have a
Power  Mac 7500.  After getting used to the Mac I like it alot and have quite
a bit of native software, most recently Deck 2.5.1,   a hard disk recording
program that's great and amazing to me, even if the Falcon purportedly does
the same.  Other  essential-type stuff I have that are native to the Power
Mac is Word Perfect 3.5, Now Up-to-date Contact 3.5.1 (PIM),  Quicken 6
Deluxe (beats pants off of Phasar 'cept Phasar prints checks much faster...),
Norton Utilities Mac which  several components are PPC native, ClarisWorks
4.04, PPC versions of both Netscape and Mosaic I still use the MSTE  for
sequencing but eventually will move to the Mac.

There are little in the way of native sequencing programs.  Dr. T's Omega 2
is great but I long for the integration of  notation, piano roll, event
lists, all on one screen working together.  I think Logic for Mac might be
native but I'm still  waiting.  Also, there isn't a good fax program for the
Mac.  People tout the program that is bundled with Global Village  modems as
superior to the commercial products!  Thus, Straight Fax still gets a work-
out now and then.  I think the Mac  is a cooler and more elegant machine than
Win 3.1.  Win '95 I don't know.  If the virtual shoe fits, wear it!"

I reply to DAK:

"On all of the native PPC stuff, I wasn't implying that there isn't any good
software available, just that I had no idea  what was or wasn't available.
I'm glad that people are finding what they need!  I like the idea of the PPC,
and of  competition in general... it's what keeps progress going."

Frank Heller jumps in and adds his thoughts on another online service and
Atari computing:

"Those miserable, worthless sacks had the nerve to RAISE their prices?  Ha ha
ha ha.

Boy am I ever glad I left that cyber-wasteland 2 years ago. I should point
out that the Atari section was run by some very  nice, people...and I was
sorry to leave them behind...but the GEnie O/S and baud rate was overidingly
puh-thetic as well  as the Midi forum (they had sysops who couldn't and
hadn't uploaded files in close to a year). Steinberg closed up shop  because
of that very problem. Oh well....that's progress.

I still have a 1040Ste and a C-LAB 030mk-II along with a a MAc Powerbook 520C
and a PPC7500/100 like yourself.  Aint it cool when native stuff runs like
greased lightning?  There is still some wonderful sequencing software
available  for the Atari platform. SMPTE Track, Logic and Cubase Audio all
come to mind. For audio, SoundPool and Zero-X still  make some great
recording and editing programs....

...and this coming from someone who has to test the stuff...I can tell you
for sure: the Atari platform STILL has the best  timing. Aint nothing made
for the Mac *yet* (either in 68k or PPC emulation) that comes close.  Native
PPC?...watch  for Cubase Audio 3.0XT. This is strictly a native PPC program
that will turn the industry on its head. Mark my words:  This program is
going to be the one that gets copied by the rest of the pack."

Dom Alvear asks Bill Anderson about his source for TT upgrades:

"Could you give me a contact number for Jeff Wilner/Anson Memory Systems?  I
really want to get my TT to 26MB's!"

Bill tells Dom:

"Jeff can be reached at: (817) 467-7478 or: jef@why.net"

While on the subject of the Atari TT and RAM, my buddy Gregg Anderson asks
Bill about RAM quantities and other things:

"Let me know what the cost was for going from 2 to 8 Meg on that board.
Heck, I doubt you could even FIND a new ST  ram board these days..."  So far
as I hear, most emulations on the PPC tend to run quite a bit slower than on
their native  platforms...  The fact that they run at all is increadable but
they don't do well enough to make the emulations a primary  factor in buying
the unit...  IMHO

Like I said, the only reason I keep looking longingly at Pentiums are the
great games they have.... Otherwise It would be  a MAC based PPC since it's
the closest thing out there to our Atari interface's look & feel...."

I reply to Gregg:

"From what I've heard, the key [to being happy with a Power PC] is to find
things you need that will run in PPC "native"  (or what ever they call it)
mode.  Emulation will probably always be slower than the real platform that
the software was  intended for (given equal processors).  I just wonder how
much is available that has been optimized for the PPC."

Frank Heller jumps in and tells me:

"There is a utility called Speed Doubler designed specifically for PPC 68000
emulation. While it's true that the PPC runs  68k stuff pretty wanky, the
SPeed Doubler utility does increase the efficiency  by a significant amount.
Ever see the  difference between stuff running with and without WARP9 or
NVDI? Same thing.  Believe me, I know. I now have a  1040e, C-LAB 030 Mk-II,
Mac 520C PowerBook and a PPC 7500/100 to make these observations from."

I tell Frank:

"Cool!  It sounds like I should get Speed Doubler first and then tell my wife
"But Honey, I've already got this great  utility, I've got to get a Power
PC!"....  Yeah, she'll buy that.  I know I'm going to have to make a switch
eventually, it's  just a question of PPC vs. MicroSoft/Intel (and finding the
bucks to do it)..."

Frank replies:

"I guess it all depends upon what you want to do with the computer. If you
only have space for one multi-purposed  computer...there is no denying that
it is getting tougher and tougher to keep an Atari on the desk, in light of
all the stuff  available for the PC and Mac.  For instance: I will NEVER dial
CompuServe again with my 1040STe. I must've wasted  hundreds of dollars with
various lame front ends available for it.

However, for midi sequencing...nothing tops an Atari. For rock steady timing,
the machine can't be beat. And I have  used all kinds of sequencing programs
on all major platforms. I'll tell you one thing: it'll be a cold day in hell
when they  pry Cubase and my Falcon from my dead, lifeless hands."

Bill Anderson adds:

"My neighborhood Apple dealer was happy to supply me with an impressive list of PPC "native" software.  Surely you  could find the same."

In a slight fit of attitude, I tell Bill:

"I probably could... except for the fact that "my" local Apple dealer is more interested in the pomp & circumstance of  what I like to call Pond Companies...  large but shallow.  They prefer to bask in the glow of yuppiedom and collect large  sums of money for annual service contracts and then refer problems and repairs to outside agents.

They have forgotten that in 1980 (or was it 81?) I was their third visitor/customer.  Of course, at that time, they  promoted the Atari 400 over the Apple ][ and spent most of their time actually using the machines instead of paying  someone else to do it for them.  I was much more impressed with the guy in short sleeves who mused about STAR  RAIDERS being the "coolest" thing around than by the shiny 3-piece suit who now extols the virtues of mediocrity in  today's fast-paced corporate structures.

Representative of today's Apple dealers??  No, I know that this is not the case but, in my area, it's them or nothing so...  it's nothing.  In any case, I believe that the computer/OS used is less important now than it was back then and that it will  become even less so in the future. I'm sure that the PPC does have a large and gratifying list of available software but  what frightens some folks (both users and developers) off is the shrinking marketshare held by all platforms but one.  Just  look at the Atari platform's last five or six years.  Sure, the available software was comparable to that of the other  platforms, but you had to hunt and dig for some of it.  Then of course, you had to explain to others that it was "just like  [fill in the blank] on the other platform".

While all of this is okay with me, I know that it won't be with lots of folks and that will affect development of new  machines and software.  A good friend of mine just jumped ship to a PPC and he loves it.  He's a picky bugger, so I  know that it's a good machine  but he's already complaining about not being able to find things like he's seen "for Windows"."

My good friend Myles Cohen tells me:

"My advice is to save your pennies now so that you can purchase the next new wave of machines that are going to be coming along any minute now..."

I reply to Myles:

"As always, your advice is right on the mark.  I believe that in a short amount of time Motorola and Intel will have some  major competition in the processor market.  Whoever it is will be a newcomer, hungry and willing to take a risk (or  risc??) and break out of the mold.  The established processor manufacturers probably won't even see it coming. And if  they do, they'll probably say "nah, it'll never sell".

I have no idea if these new advances will be Gallium Arsenide instead of Silicon, or optical processors, or perhaps even  "biological" processors that can be grown in petri dishes, but change will come as certainly as semi-conductors arose to  supplant the vaccuum tubes of the '50's.  Perhaps new machines like Oracle's NC and whatever Sony comes out with will be the beginning, but I tend to think that they'll be only an abberation in the general trend of today's market...  Faster, stronger, cheaper, easier.

My one great fear is that computer manufacturers will go the "designer" route
with "decour options" like esthetically  pleasing cases, brightly colored
cases, and things like that.  "Buy a NUPRIN!  Little... Yellow...
Different...  Better."   <GACK>  As for saving up my pennies, now is not a
good time.  Every penny I come across is already spoken for.   Luckily, my
MSTE has agreed to last several more years!  <grin>"

Peter Joseph tells me:

"..."biological" processors that can be grown in petri dishes???

Perish the thought!  Just think of all the possible viruses!  <big grin>"

I tell Peter:

"DARN!  I wish that _I'D_ thought of that! <very big grin>"

Myles Cohen picks up the thread and tells us:

"Here is what I see for the not so distant future:

A microscopically small wire that acts as an antenna...introduced thru the
ear canal that will tap one of the "unused"  portions of the brain which can
then be employed as a personal computer...using broadcast power  and external
commands.  That will be fairly primitive...later we will use individual body
cells powered by their own mitochondria as  computers...thought
controlled...of course...  Til then, like you, I'll be using my ATARI..."

Mark Kelling quips:

"My CPU has the flu, I can't come to work today. <frown> " I just can't wait.
<big smile>"

Peter Joseph adds:

" And think of all the new company offshoots:

                        Silicon Graphics Pharmaceuticals
                          Penicilicon and TetracyliNET

                            CTRL-ALT-DISINFECT!"

Hey, we sure know how to make our own fun, don't we folks?  Meanwhile
Sysop Bob Retelle asks:

"... what would be wrong with an "esthetically pleasing case"...?  My current
PC is in a typical light tan midi-tower  case, identical to millions and
millions of similar cases...  it's OK, and functions just fine, but what
would be wrong with  a case that looks better..?  I've recently seen
"generic" cases in black...  and they look pretty sharp..!

(Unfortunately they're also a bit more expensive, doubtlessly because of a
smaller economy of scale)  I'm thinking of  going with one of these black
cases for the next PC I build for myself.  Others might prefer a different
"brightly colored  case"...  adding a more personal touch to the "personal
computer"..."

I tell Bob:

"Nothing at all.  I've seen the generic black cases as well and you're

right...  they do look sharp.  My problem is that I  can see it becoming a
"form over content" thing.... "Sure, it's only a '386, but it looks great
with my coffee table".  I  remember seeing Mario Giorgio (sp?) at a show in
Asheville showing off Nathan Potechin's Candy-Apple red TT.  That  was one
cool box but I wouldn't have been impressed if it had been a 520.

I've even considered stripping my MegaSTE down and spraying the case a matte
black and adding a decal of my family  crest but have never gotten around to
it.  And I can tell you honestly that I drooled over DMJ's "for sale" TT in a
"stoned" case but, again, it wasn't my major consideration.

The only thing that could be worse than "form-over-content" machines would be
machines whose operating systems  automatically install software for an
online service other than CompuServe and get that service up to a million
users in  three months.... oh, sorry, was that out loud??"

       Well folks, that's about it for this week.  Tune again next week, same
time, same station, and be ready to listen to what  people are saying when...

                        PEOPLE ARE TALKING


                        EDITORIAL  QUICKIES


                        Happy Holidays to All


                  STReport International OnLine Magazine

                     [S]ilicon [T]imes [R]eport
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